

# Kentucky Occupational Outlook to 2016



**A STATEWIDE ANALYSIS OF WAGES, EMPLOYMENT, GROWTH, AND TRAINING**

**Education and Workforce Development Cabinet**

Department for Workforce Investment

Office of Employment and Training



# **KENTUCKY OCCUPATIONAL OUTLOOK TO 2016**

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## Preface

Which jobs will be in demand in Kentucky from now until 2016? Which occupations will provide the most job openings each year through 2016? Which occupations are likely to grow the fastest between 2006 and 2016? Which are likely to decline? This report offers some insight into these oft-asked questions. Students, job seekers, counselors, economic developers and market analysts should find this publication helpful.

The labor market information in this publication is based on a wide spectrum of statistics collected and developed by the staff of the Research and Statistics (R&S) Branch in the Kentucky Office of Employment and Training (OET). The Labor Market Information Section within the R&S Branch also projected and estimated the numbers which serve as the base for this publication.

These estimates reflect only the predicted *demand* for labor from 2006 through 2016. The *supply*, or the number of educated/trained workers to fill future job openings, is beyond the scope of this report.

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## Highlights

The Kentucky economy is expected to average over 67,000 job openings annually between 2006 and 2016.

Over the 2006-2016 decade, total employment is projected to increase by 194,100 jobs, or 9.8 percent. Over the previous decade (1996-2006) total employment increased by 175,100 jobs, or 10.5 percent.

The emergence of new workforce trends and the decline of the old are inevitable as the global economy continually changes.

Nearly a quarter of 2016 projected employment will be in two of the largest occupational groups: Office and Administrative Support Occupations and Sales and Related Occupations.

Computer and Mathematical Occupations is projected to be the fastest growing group with a 28.4 percent increase in employment; close behind is Healthcare Support Occupations at 24.9 percent and Healthcare Practitioners and Technical Occupations at 22.9 percent.

Healthcare-related occupations are expected to grow at such a high rate primarily because of Kentucky's aging population.

At 19.1%, Legal Occupations are projected to grow more than twice as fast as the average rate for all occupations.

Office and Administrative Support Occupations are expected to grow at the very slow rate of only 2.2 percent between 2006 and 2016.

Obtaining a postsecondary degree offers increased job security and greater potential for financial gain.

Low pay is given for jobs requiring only short-term on-the-job training. Pay is significantly higher for jobs requiring moderate-term on-the-job training, but this category is projected to grow the slowest among all categories at 4.7 percent between 2006 and 2016.

## Highlights (continued)

Occupations requiring more education will increase in share of total employment between 2006 and 2016.

Occupations requiring short-term on-the-job training provide the best opportunity for persons not considering college with over 27,500 annual job openings estimated through 2016. This group is projected to have over six times as many annual job openings as those occupations requiring long-term training, and more than twice as many as those requiring moderate-term training.

Occupations usually requiring an associate's degree are expected to grow the fastest of all education/training groups between 2006 and 2016 at 25 percent.

Occupations generally requiring a bachelor's degree will provide the largest number of annual job openings for those seeking postsecondary education.

Occupations that require a doctoral degree are expected to grow 21.2 percent as a group between 2006 and 2016, the second highest among all groups.

The occupations generally requiring a first professional degree lie almost exclusively in the field of Healthcare Practitioners and Technical Occupations. Lawyers and Law Teachers (Postsecondary) are the only two exceptions.

Occupations requiring short-term on-the-job training will account for almost 40 percent of the total average annual job openings.

Changes in technology, work processes, automation, the demand for products/services, and outsourcing are among the major causes of employment growth and decline among occupations.

# A User's Guide to Occupational Outlook Statistics

*When looking at an occupation, what key outlook data should you review?*

**Annual Job Openings** (2006-2016) The annual openings estimate the likely annual demand for workers in each occupation.

**Job Growth Rate** (2006-2016) The job growth rate shows the percentage each occupation is likely to grow or decline between 2006 and 2016.

*What creates job openings?*

- 1) **Employment growth** (new jobs).
- 2) **Employment separations** (job vacancies created by persons leaving an occupation). The **employment separation number** for an occupation is the rate at which workers leave that occupation.

*What creates employment change?*

- 1) **Industry growth or decline** has the greatest influence on employment change. Industry growth occurs when the demand for goods and services rises and, in turn, the demand for workers to produce those goods and services also rises.
- 2) **Technological change** can raise the demand for some skills while eliminating the need for other skills.
- 3) **New ways of doing business** such as self-service, 24-hour operations, etc., can affect employment change.

*Do workers leave some occupations more frequently than other occupations?*

**Yes.** Every occupation has a different employment separation number. Occupations requiring more education and training have a higher percentage of full-time workers and lower separation numbers. Occupations requiring less education tend to have higher separation numbers.

*What factors affect the number of job openings for an occupation?*

**The overall size of the occupation** - how many workers are employed now?

**The occupation's separation number** - how many job vacancies are created from workers leaving the occupation?

**The occupation's rate of change** - how fast is the occupation growing or declining?

*What factors are most important?*

The **overall employment** size and the number of separations are more important than the percent change in affecting the number of job openings.

*What is the best way to compare one occupation with another?*

Look at the total **Average Annual Job Openings** not just openings resulting from growth. A large number of openings means it should be relatively easy to find a job in that occupation.

Look at the **Job Growth Rate** (2006-2016) expressed as a percentage. A high percentage increase in employment means there should be a greater chance for advancement because demand is likely to remain strong for some time.

## Kentucky Occupational Outlook to 2016

The future is never certain, but it can be very useful to look ahead and try to determine the likely employment outlook for the Kentucky economy through the year 2016. Labor market conditions in Kentucky are becoming more favorable for employment than they have been in recent years, and the long-term job outlook projects a continuation of that trend.

*The Kentucky economy should provide over 67,000 job openings annually.*

The Kentucky economy is expected to add over 194,000 new jobs from 2006 through 2016. An additional 464,000 job vacancies will likely occur as workers leave or separate from various occupations. Such job vacancies become available from retirements, promotions, or transfers within occupations. This means that the Kentucky economy should generate over 67,000 jobs per year through 2016.

*Nearly one-third of the new jobs created between 2006 and 2016 will be in three very large occupational groups.*

Employment in three major occupational groups — Healthcare Practitioners and Technical Occupations, Food Preparation and Serving Related Occupations and Transportation and Material Moving Occupations — will grow 22.9, 14.5, and 9.4 percent respectively between 2006 and 2016, and will add the most new jobs over the ten-year period. (See Table 1, page 6.) These three major groups, which are on opposite ends of the educational attainment spectrum, are expected to provide about 30 percent of total job growth from 2006 to 2016.

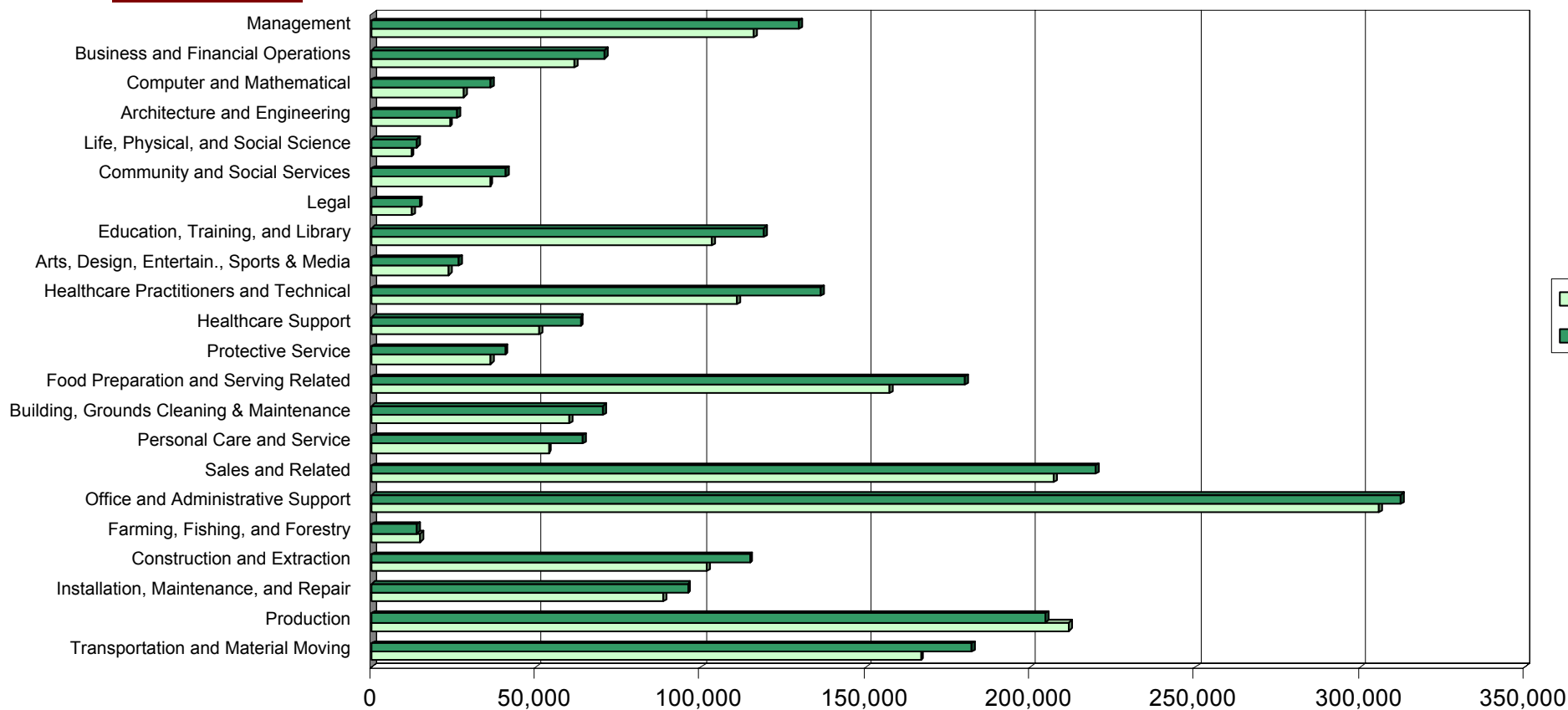
*The Computer and Mathematical Occupations group should be the fastest growing of all occupational groups.*

Computer and Mathematical Occupations are projected to grow at a very fast pace — 28.4 percent as a group between 2006 and 2016 — over three times the average rate of growth for all occupations. Four of the top five fastest growing occupations are expected to be in this category.

*Very few occupational groups are projected to provide more openings from growth than replacements.*

Only four of the 22 major occupational groups --- Computer and Mathematical Occupations, Legal Occupations, Healthcare Practitioners and Technical Occupations, and Healthcare Support Occupations --- are expected to generate more job openings from growth than from replacements.



**CHART 1****Kentucky Employment by Major Occupational Category**

***Only two of the 22 major occupational groups are projected to experience a decline in employment.***

While employment in some individual occupations may decline, only Production Occupations and Farming, Fishing, and Forestry Occupations are expected to decline as a group.

***Two large occupational groups are expected to account for 25 percent of projected job growth through 2016.***

Healthcare Practitioners and Technical Occupations and Food Preparation and Serving Related Occupations are expected to generate a combined 48,000 new jobs through 2016.

**TABLE 1: Employment and Average Annual Job Openings, 2006-2016, by Occupational Categories**

| Occupation   |      | Employment |           |                      |        | Change    |         | Total Average Annual Job Openings by Occupation Category |                      |
|--|------|------------|-----------|----------------------|--------|-----------|---------|--|----------------------|
|  |      | Number     |           | Percent Distribution |        | 2006-2016 |         | 2006-2016  |                      |
| Category   | Code | 2006       | 2016      | 2006                 | 2016   | Number    | Percent | Number*  | Percent Distribution |
| Total, All Occupations                               |      | 1,981,056  | 2,175,207 | 100.00               | 100.00 | 194,151   | 9.80    | 69,927   | 100.00               |
|  |      |            |           |                      |        |           |         |  |                      |
| Management Occupations                               | 11   | 116,168    | 129,702   | 5.86                 | 5.96   | 13,534    | 11.65   | 3,357  | 4.80                 |
| Business and Financial Operations Occupations        | 13   | 61,748     | 70,823    | 3.12                 | 3.26   | 9,075     | 14.70   | 2,036  | 2.91                 |
| Computer and Mathematical Occupations                | 15   | 28,176     | 36,179    | 1.42                 | 1.66   | 8,003     | 28.40   | 1,172  | 1.68                 |
| Architecture and Engineering Occupations             | 17   | 23,641     | 26,109    | 1.19                 | 1.20   | 2,468     | 10.44   | 805  | 1.15                 |
| Life, Physical, and Social Science Occupations       | 19   | 12,004     | 13,684    | 0.61                 | 0.63   | 1,680     | 14.00   | 454  | 0.65                 |
| Community and Social Services Occupations            | 21   | 35,842     | 40,529    | 1.81                 | 1.86   | 4,687     | 13.08   | 1,152  | 1.65                 |
| Legal Occupations                                    | 23   | 12,228     | 14,565    | 0.62                 | 0.67   | 2,337     | 19.11   | 374  | 0.53                 |
| Education, Training, and Library Occupations         | 25   | 103,093    | 119,034   | 5.20                 | 5.47   | 15,941    | 15.46   | 3,725  | 5.33                 |
| Arts, Design, Entertain., Sports & Media Occupations | 27   | 23,552     | 26,405    | 1.19                 | 1.21   | 2,853     | 12.11   | 744  | 1.06                 |
| Healthcare Practitioners and Technical Occupations   | 29   | 110,887    | 136,273   | 5.60                 | 6.26   | 25,386    | 22.89   | 4,640  | 6.64                 |
| Healthcare Support Occupations                       | 31   | 50,738     | 63,385    | 2.56                 | 2.91   | 12,647    | 24.93   | 2,073  | 2.96                 |
| Protective Service Occupations                       | 33   | 36,294     | 40,429    | 1.83                 | 1.86   | 4,135     | 11.39   | 1,404  | 2.01                 |
| Food Preparation and Serving Related Occupations     | 35   | 157,187    | 179,939   | 7.93                 | 8.27   | 22,752    | 14.47   | 8,509  | 12.17                |
| Building & Grounds Cleaning & Maint. Occupations     | 37   | 60,124     | 70,368    | 3.03                 | 3.24   | 10,244    | 17.04   | 2,215  | 3.17                 |
| Personal Care and Service Occupations                | 39   | 53,734     | 64,272    | 2.71                 | 2.95   | 10,538    | 19.61   | 2,376  | 3.40                 |
| Sales and Related Occupations                        | 41   | 207,033    | 219,855   | 10.45                | 10.11  | 12,822    | 6.19    | 8,316  | 11.89                |
| Office and Administrative Support Occupations        | 43   | 305,667    | 312,397   | 15.43                | 14.36  | 6,730     | 2.20    | 8,797  | 12.58                |
| Farming, Fishing, and Forestry Occupations           | 45   | 14,636     | 13,861    | 0.74                 | 0.64   | -775      | -5.30   | 426  | 0.61                 |
| Construction and Extraction Occupations              | 47   | 101,883    | 114,721   | 5.14                 | 5.27   | 12,838    | 12.60   | 3,343  | 4.78                 |
| Installation, Maintenance, and Repair Occupations    | 49   | 88,438     | 95,951    | 4.46                 | 4.41   | 7,513     | 8.50    | 2,780  | 3.98                 |
| Production Occupations                               | 51   | 211,446    | 204,679   | 10.67                | 9.41   | -6,767    | -3.20   | 5,506  | 7.87                 |
| Transportation and Material Moving Occupations       | 53   | 166,537    | 182,131   | 8.41                 | 8.37   | 15,594    | 9.36    | 5,414  | 7.74                 |
| * Includes growth (new jobs) plus separations.       |      |            |           |                      |        |           |         |  |                      |

## The Value of Education

Many factors help to determine one's success in the future workplace of Kentucky. However, education will continue to be one of the most critical factors in gaining employment in a chosen field. While there are many reasons other than money for selecting a career, traditionally, the more education you have the more money you can earn. In fact, the value of education has increased during the past 20 years. Table 2 below clearly shows the current general monetary value of education within the state.

### *There are significant payoffs for attending a postsecondary school.*

From the data listed in Table 2, one can clearly see the monetary benefits of each level of training and education. The smallest training category, which consists of all degrees higher than a bachelor's degree, earns by far the most on average. Occupations that generally require a bachelor's degree or a bachelor's degree with work experience earn markedly less than those requiring a postgraduate degree, but they still earn a great deal more on average than those occupations that normally require an associate's degree or postsecondary vocational training.

It is important to note that the category consisting of occupations generally requiring an associate's degree or postsecondary vocational training can be somewhat misleading statistically. This group, when combined, earns less on average than the category consisting of occupations generally requiring work experience in a related occupation or long-term on-the-job training. One should not subsequently conclude that there is no benefit in attaining an associate's degree. Occupations requiring an associate's degree account for about 42 percent of the approximate 186,000 persons employed in this category with an average annual wage of over \$47,000; occupations requiring postsecondary vocational training make up the rest with an average annual wage of about \$29,000.

The bulk of Kentucky's workforce continues to reside in those occupations requiring either moderate-term or short-term on-the-job training. These categories, when combined, account for over 57 percent of the state's total employment. This reflects the Kentucky economy's persistent reliance on manufacturing and services in recent years. With technology expanding throughout the workforce, many of these occupations will require additional skills and training in the future.

**TABLE 2: 2007 Average Annual Kentucky Wage Estimates by Training Category**

| Training Category  | Training Code | Total Employment | Average Annual Wage |
|--|---------------|------------------|---------------------|
| Postgraduate   | 1,2,3         | 65,391           | \$77,262            |
| Bachelor's Degree & Bachelor's Degree with Work Experience | 4,5           | 281,497          | \$63,587            |
| Associate's Degree or Postsecondary Vocational Training    | 6,7           | 186,209          | \$36,864            |
| Work Experience in a Related Occupation or Long-Term OJT   | 8,9           | 309,190          | \$39,614            |
| Moderate-Term OJT  | 10            | 472,368          | \$31,131            |
| Short-Term OJT   | 11            | 666,399          | \$21,235            |

## Education and Training

This section of the report groups Kentucky occupations by levels of education and training generally required to gain employment in a chosen field. The Bureau of Labor Statistics developed 11 broad education and training categories to present the occupations for analysis, which are grouped as follows:

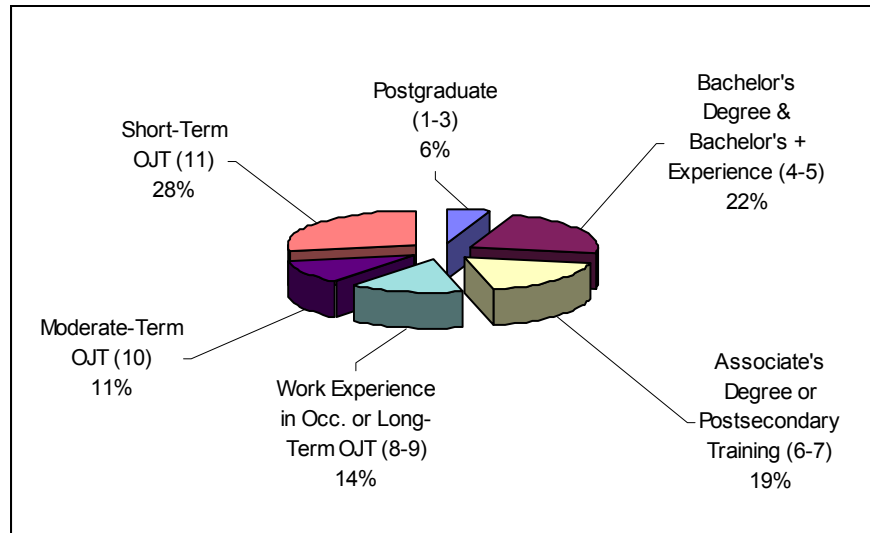
- (1) Professional degree, (such as physicians, lawyers, clergy, etc.);
- (2) Doctoral degree;
- (3) Master's degree;
- (4) Bachelor's degree plus work experience;
- (5) Bachelor's degree;
- (6) Associate degree;
- (7) Postsecondary vocational training;
- (8) Work experience in a related occupation;
- (9) Long-term, on-the-job training;
- (10) Moderate-term, on-the-job training; and
- (11) Short-term, on-the-job training.

The percentage of new jobs by training category that the Kentucky economy is likely to create between 2006 and 2016 are displayed in Chart 2. Categories 1, 2 and 3 are combined as "Postgraduate"; categories 4 and 5 are combined as "Bachelor's degree and Bachelor's degree with Work Experience"; categories 6 and 7 are combined as "Associate's Degree or Postsecondary Training"; and categories 8 and 9 are combined as "Work Experience in a Related Occupation or Long-Term OJT".

The remaining categories are shown individually. The largest education and training category, short-term OJT, with over 666,000 workers in 2006, is projected to account for 28 percent of all new job openings between 2006 and 2016. The category consisting of bachelor's degree and bachelor's degree with experience accounted for 14.2 percent of all Kentucky workers in 2006 and that share is projected to increase to 14.9 percent of total employment by 2016. About 3.3 percent of workers are employed in occupations that generally require more education than a bachelor's degree. This number is expected to increase to 3.5 percent by 2016.

**CHART 2**

**Percent of Total Kentucky Job Growth by Education/Training Category (2006-2016)**



***Occupations requiring more education are increasing in share of total employment.***

Occupations requiring at least an associate's degree accounted for 21 percent of all Kentucky employment in 2006. This share is projected to increase to 22 percent by 2016. Those occupations requiring just a high school diploma or on-the-job training will decrease in share of total employment.

***Low pay is given for jobs requiring only short-term on-the-job training.***

The largest group of occupations consists of those requiring short-term on-the-job training, meaning workers generally learn the required job skills in a few weeks or less. In 2006, approximately 666,000 Kentucky workers in these occupations accounted for over 33 percent of the state's total employment. Most occupations in this category are Office and Administrative Support Occupations, Production Occupations, and Transportation and Material Moving Occupations. Almost half of the workers in these occupations earn \$10 or less an hour.

**TABLE 3: Employment and Average Annual Job Openings, 2006-2016, by Education/Training Categories**

| Education/Training                               |      | Employment |           |                      |        | Change    |         | Total Average Annual Job Openings by Training Category |                      |
|--|------|------------|-----------|----------------------|--------|-----------|---------|--|----------------------|
|  |      | Number     |           | Percent Distribution |        | 2006-2016 |         | 2006-2016  |                      |
| Category   | Code | 2006       | 2016      | 2006                 | 2016   | Number    | Percent | Number   | Percent Distribution |
| Total, All Occupations                           |      | 1,981,056  | 2,175,207 | 100.0%               | 100.0% | 194,151   | 9.8%    | 69,927   | 100.0%               |
|  |      |            |           |                      |        |           |         |  |                      |
| First Professional Degree                        | 1    | 22,891     | 26,472    | 1.2%                 | 1.2%   | 3,581     | 15.6%   | 716  | 1.0%                 |
| Doctoral Degree                                  | 2    | 10,542     | 12,778    | 0.5%                 | 0.6%   | 2,236     | 21.2%   | 461  | 0.7%                 |
| Master's Degree                                  | 3    | 31,958     | 37,078    | 1.6%                 | 1.7%   | 5,120     | 16.0%   | 1,171  | 1.7%                 |
| Work Experience Plus Bachelor's or Higher Degree | 4    | 81,375     | 91,515    | 4.1%                 | 4.2%   | 10,140    | 12.5%   | 2,551  | 3.6%                 |
| Bachelor's Degree                                | 5    | 200,122    | 233,062   | 10.1%                | 10.7%  | 32,940    | 16.5%   | 7,156  | 10.2%                |
| Associate's Degree                               | 6    | 79,130     | 98,874    | 4.0%                 | 4.5%   | 19,744    | 25.0%   | 3,515  | 5.0%                 |
| Postsecondary Vocational Training                | 7    | 107,079    | 123,846   | 5.4%                 | 5.7%   | 16,767    | 15.7%   | 3,752  | 5.4%                 |
| Work Experience in a Related Occupation          | 8    | 161,924    | 177,679   | 8.2%                 | 8.2%   | 15,755    | 9.7%    | 4,987  | 7.1%                 |
| Long-Term On-The-Job Training                    | 9    | 147,266    | 158,865   | 7.4%                 | 7.3%   | 11,599    | 7.9%    | 4,442  | 6.4%                 |
| Moderate-Term On-The-Job Training                | 10   | 472,368    | 494,739   | 23.8%                | 22.7%  | 22,371    | 4.7%    | 13,466   | 19.3%                |
| Short-Term On-The-Job Training                   | 11   | 666,399    | 720,831   | 33.6%                | 33.1%  | 54,432    | 8.2%    | 27,516   | 39.3%                |

***Pay is significantly higher for jobs requiring moderate-term, on-the-job training.***

Workers in occupations requiring moderate-term on-the-job training can generally learn the necessary job skills after one to twelve months of combined on-the-job experience and informal training. These occupations include about 472,000 workers, or 23.8 percent of Kentucky's total employment in 2006. Employment in these occupations is projected to increase by more than 22,000 by 2016. Workers in this category will earn significantly more than those in the lowest training category; over 75 percent will average at least \$10 per hour.

***Occupations requiring more than a year of on-the-job experience and formal training provide the best opportunities for persons not considering college.***

Occupations generally requiring more than a year of on-the-job experience and formal training — such as carpenters, police officers or maintenance repairers — accounted for 7.4 percent of Kentucky's total employment in 2006. A vast majority of employees in these occupations earn more than \$10 per hour. An additional 8.2 percent of Kentucky's workforce are employed in occupations requiring experience in a related occupation. Many of these workers are supervisors or managers and all occupations in this group earn over \$10 per hour on average. Occupations requiring postsecondary vocational training accounted for an additional 107,000, or 5.4 percent, of total employment in 2006. None of the roughly 50 occupations listed in this category earn less than \$10 an hour on average.

***Occupations usually requiring a doctoral degree are expected to be the second fastest growing education/training group between 2006 and 2016.***

Occupations usually requiring a doctoral degree accounted for only 0.53 percent of all jobs in 2006, but are expected to increase 21.2 percent by 2016, making this the second fastest growing of all education/training categories. Almost all of these occupations are classified as Education, Training, and Library Occupations under the subheading of Postsecondary Teachers. This growth is indicative of the growing need for qualified teachers as more people seek postsecondary education.

***For persons considering college, a bachelor's degree provides the largest number of job opportunities.***

Occupations requiring a bachelor's degree accounted for 10.1 percent of all workers in 2006, and that figure is expected to increase to 10.7 percent by 2016. Employment in this category approximated 200,000 in 2006 and is projected to increase by nearly 33,000 workers by 2016. In addition, jobs in which workers needed a bachelor's degree and experience before obtaining employment accounted for another 4.1 percent of all workers in 2006. Many employees in this category work in Business and Financial Operations Occupations and Architecture and Engineering Occupations. The average annual wage for occupations in these two categories is over \$63,000.

***Occupations requiring education beyond a bachelor's degree should grow 16.7 percent between 2006 and 2016.***

A relatively small proportion of workers (3.3%) are employed in occupations requiring education beyond a bachelor's degree, including occupations requiring a professional degree (1.2 percent), doctoral degree (0.5 percent) and master's degree (1.6 percent). Combined, these higher education categories are projected to grow by nearly 11,000 jobs between 2006 and 2016.

## **Charting the Occupational Outlook**

The following 14 charts focus on Kentucky occupations with the most annual job openings, fastest-growing employment and significant employment decline from 2006 to 2016. Each chart ranks the top 20 occupations, from highest to lowest, according to the number of annual job openings or percentage of change between 2006 and 2016. Each chart also includes the 2007 average hourly wage for each occupation. Comments beside the chart summarize the occupational openings and job growth and include factors that affect these changes.

The first 12 charts organize occupations by the levels of education and training usually required for one to obtain employment.

Charts 3 and 4 present Kentucky occupations usually requiring a professional or a graduate degree. First professional degrees, doctoral degrees, and master's degrees are grouped together in the "Graduate or Professional Degree" category.

Charts 5 and 6 display Kentucky occupations usually requiring a bachelor's degree or work experience in addition to a bachelor's degree.

Charts 7 and 8 rank the occupations generally requiring an associate's degree or postsecondary vocational certificate.

Charts 9 and 10 present the Kentucky occupations generally requiring long-term on-the-job training or work experience in a related occupation.

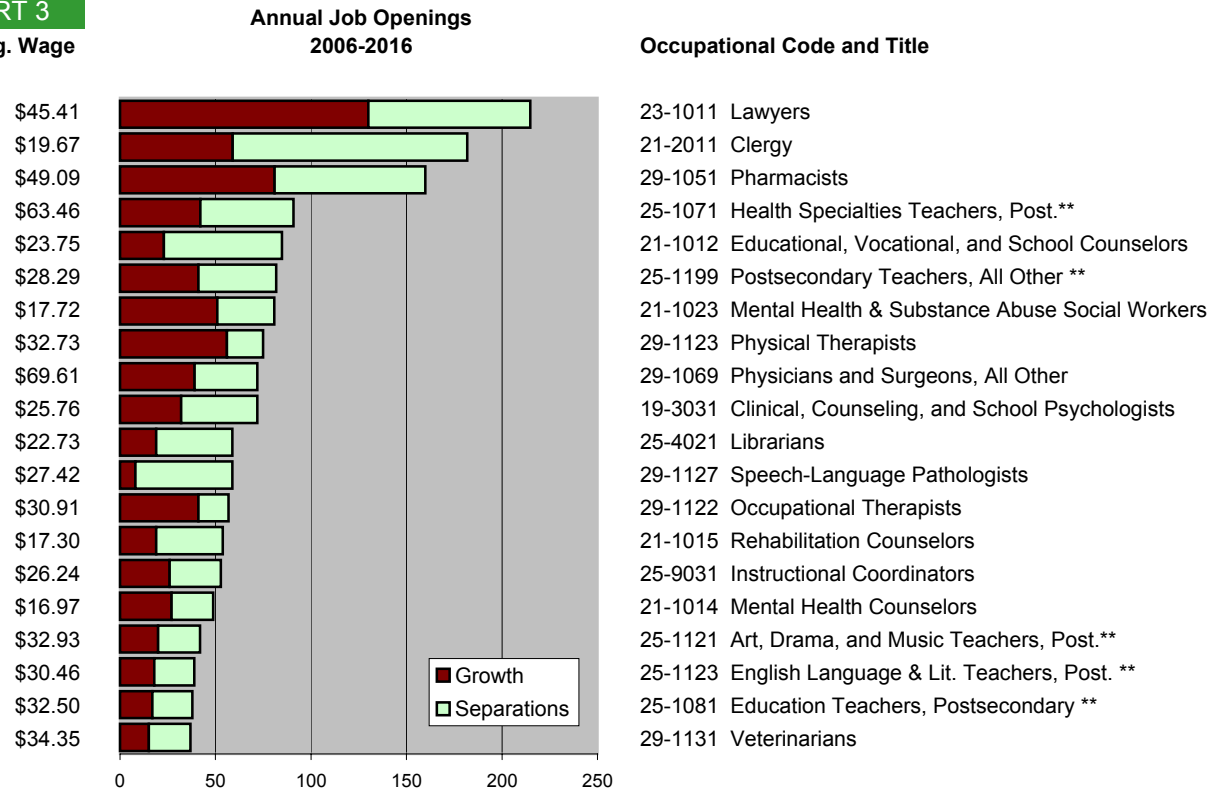
Charts 11 and 12 display occupations requiring moderate-term on-the-job training.

Kentucky occupations requiring short-term on-the-job training are presented in Charts 13 and 14.

The final two charts, 15 and 16, identify Kentucky occupations in which employment is expected to decline significantly between 2006 and 2016.

## Twenty Kentucky Occupations with the Most Annual Job Openings Generally Requiring a Graduate or Professional Degree\*

**CHART 3**  
2007 Avg. Wage



*There are nearly 100 occupations that generally require a graduate or professional degree, but these 20 represent almost 70 percent of the projected total annual job openings in this category. Eighteen of these 20 are classified as Education, Training & Library Occupations, Healthcare Practitioners & Technical Occupations, or Community and Social Service Occupations. Approximately 47 percent of the total job openings in this category should be generated by employment growth, with the remaining 53 percent coming*

*The average annual wage for occupations in this category is over \$77,000.*

\*Ranked according to the total number of job openings each year, this chart illustrates the top 20 occupations in Kentucky for which a person usually needs a professional degree, master's degree, or doctoral degree to perform the duties. The dark bar represents the number of job openings due to employment growth. The light bar represents job openings due to workers separating from the occupation.

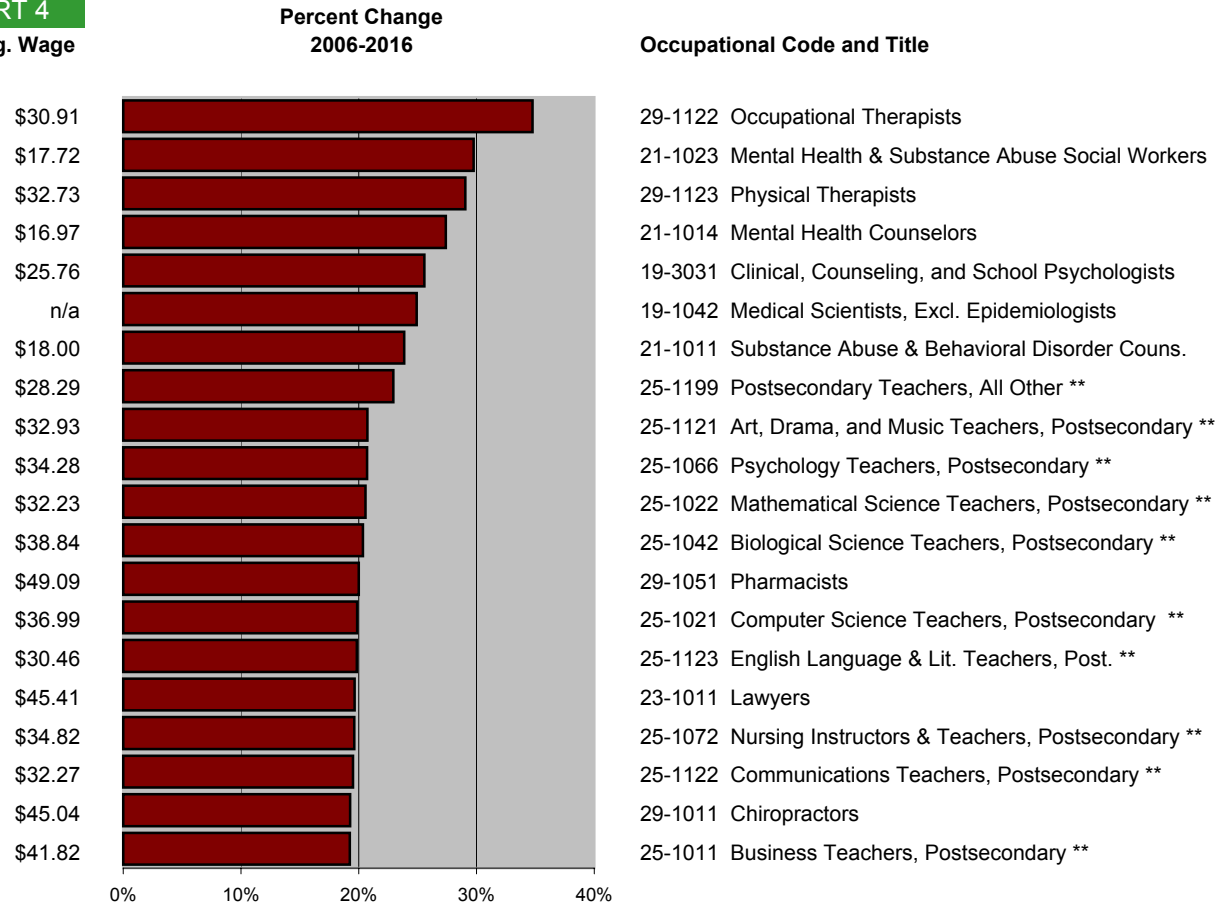
\*\*Average hourly wages for teacher occupations were calculated by assuming 9.5 working months per year at 40 hours per week.

Source: Kentucky Education and Workforce Development Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch



## Twenty Fastest Growing Kentucky Occupations Generally Requiring a Graduate or Professional Degree\*

**CHART 4**  
2007 Avg. Wage



*Occupations that require a graduate or professional degree are expected to grow by 16.7 percent as a group between 2006 and 2016, making this the second fastest growing education/training category.*

*Occupational therapists top the list with the fastest growth rate in this group at nearly 3.5 times the average rate for all occupations.*

*Postsecondary teachers account for half of these fastest growing occupations.*

*Seventeen of these 20 are classified as Education, Training & Library Occupations, Healthcare Practitioners & Technical Occupations, or Community and Social Service Occupations.*

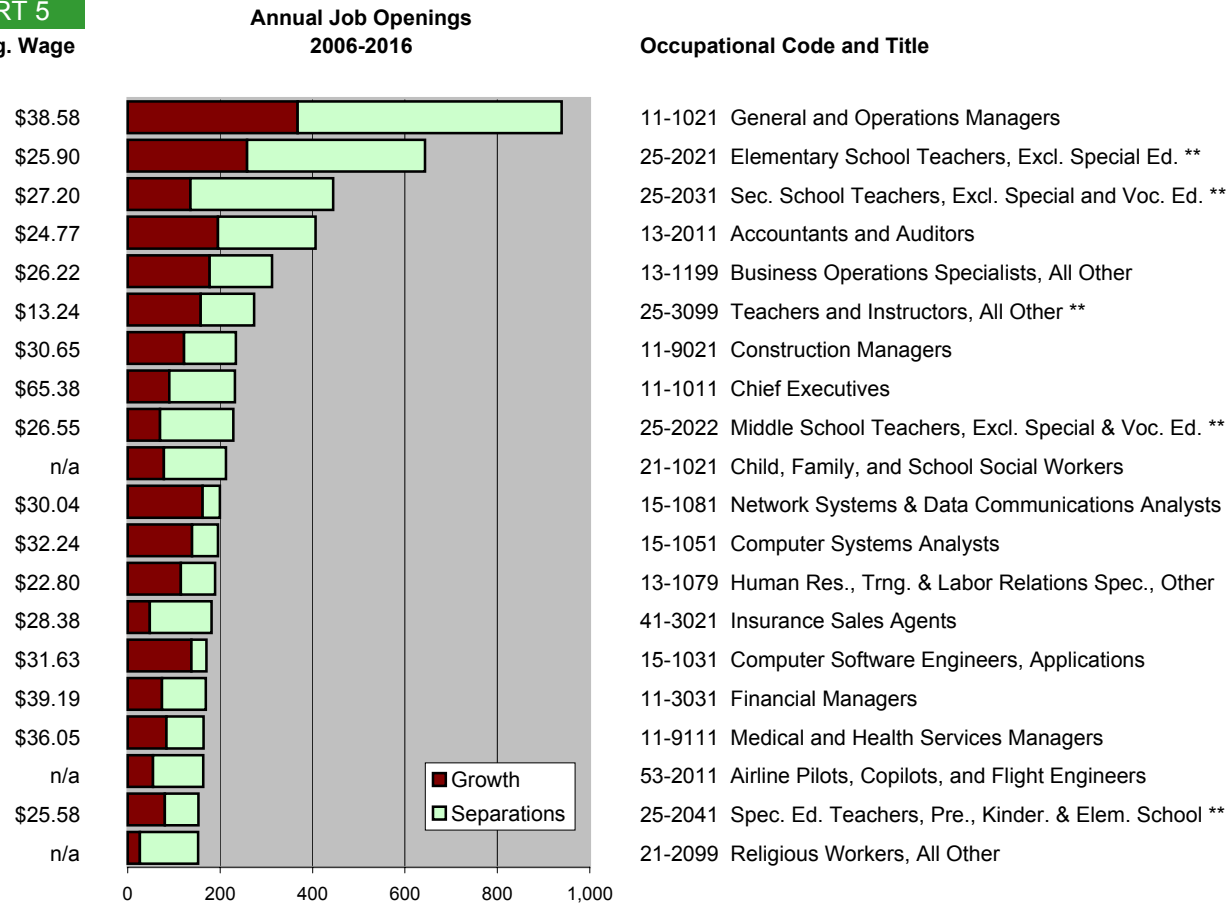
\*Occupations with less than 20 projected job openings each year are not included in this chart.

\*\*Average hourly wages for teacher occupations were calculated by assuming 9.5 working months per year at 40 hours per week.

Source: Kentucky Education and Workforce Development Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

## Twenty Kentucky Occupations with the Most Annual Job Openings Generally Requiring a Bachelor's Degree or Bachelor's Degree and Work Experience\*

**CHART 5**  
2007 Avg. Wage



*There are over 140 occupations that generally require a bachelor's degree or bachelor's degree and work experience, but these 20 represent almost 60 percent of the projected total annual job openings in this category.*

*Half of these occupations are classified as Education, Training and Library Occupations or Management Occupations.*

*Approximately 45 percent of the total job openings in this category should be generated by employment growth, with the remaining 55 percent coming from separations.*

*General and Operations Managers are expected to have nearly 1.5 times as many annual openings as any other occupation in this category.*

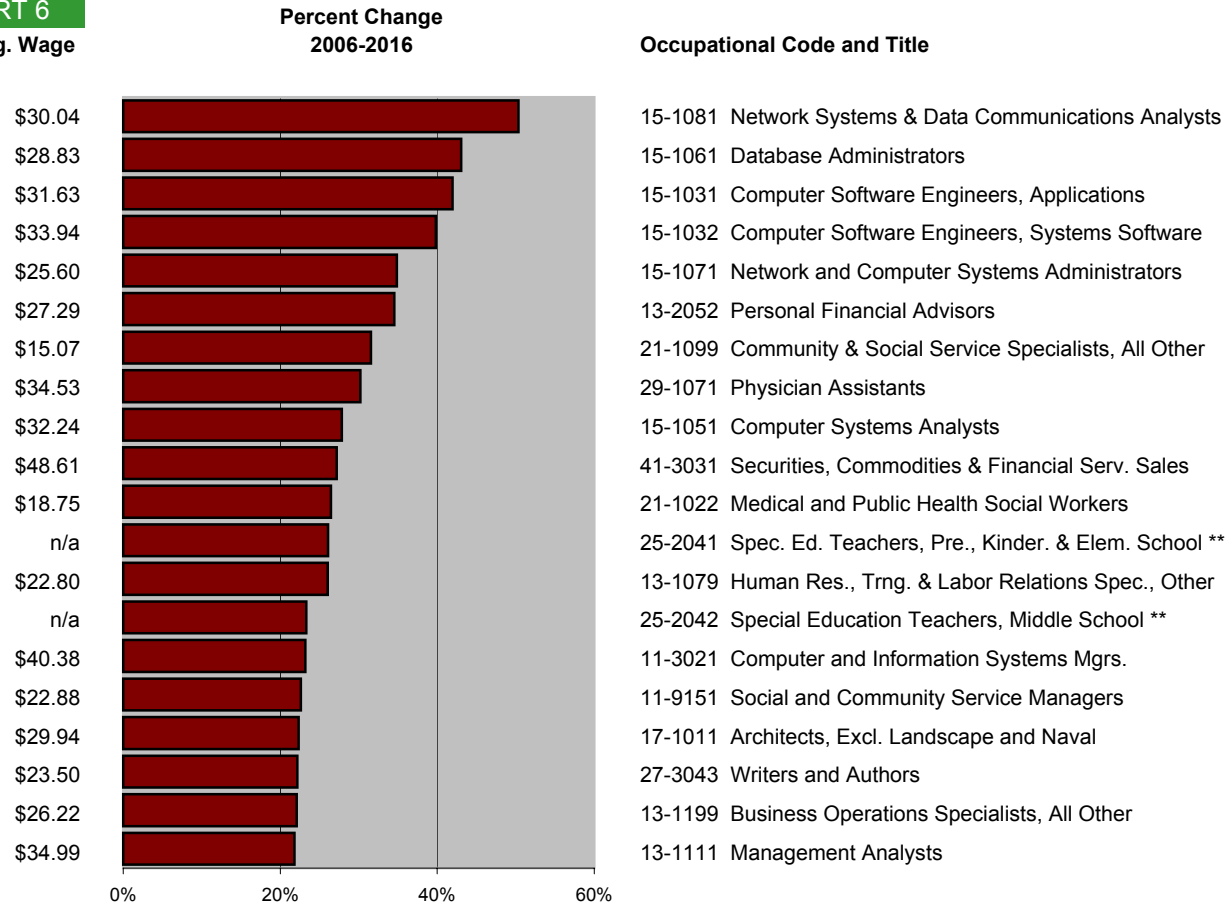
\*Ranked according to the total number of job openings each year, this chart illustrates the top 20 occupations in Kentucky for which a person usually needs a bachelor's degree or bachelor's degree and work experience to perform the duties. The dark bar represents the number of job openings due to employment growth. The light bar represents job openings due to workers separating from the occupation.

\*\*Average hourly wages for teacher occupations were calculated by assuming 9.5 working months per year at 40 hours per week.

Source: Kentucky Education and Workforce Development Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

## Twenty Fastest Growing Kentucky Occupations Generally Requiring a Bachelor's Degree or Bachelor's Degree and Work Experience\*

**CHART 6**  
2007 Avg. Wage



*Occupations that require a bachelor's degree or bachelor's degree and work experience are projected to grow by 15.3 percent as a group between 2006 and 2016, making this the third fastest growing education/training category.*

*Network systems and data communications analysts top the list as the occupation with the fastest growth rate in this group at over five times the average rate for all Kentucky occupations.*

*Computer specialists account for six of the fastest growing occupations in this category, including each of the top five.*

*Business and Financial Operations Occupations are represented four times on this list.*

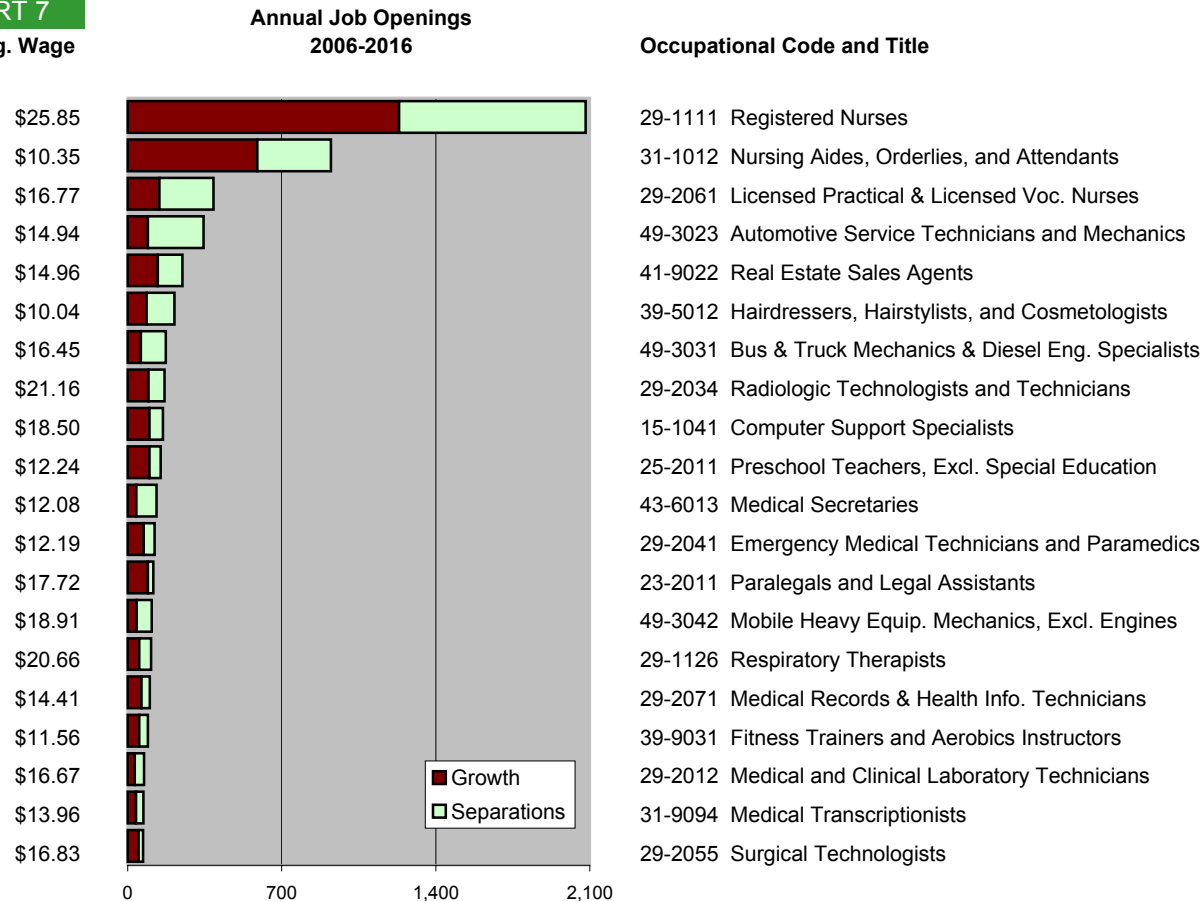
\*Occupations with less than 20 projected job openings each year are not included in this chart.

\*\*Average hourly wages for teacher occupations were calculated by assuming 9.5 working months per year at 40 hours per week.

Source: Kentucky Education and Workforce Development Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

## Twenty Kentucky Occupations with the Most Annual Job Openings Generally Requiring an Associate's Degree or Postsecondary Vocational Training\*

**CHART 7**  
2007 Avg. Wage



*There are about 90 occupations that generally require an associate's degree or postsecondary vocational training, but these 20 represent over 80 percent of the projected total annual job openings in this category.*

*Eight of these occupations are classified as Healthcare Practitioners & Technical Occupations.*

*Approximately 51 percent of the total job openings in this category should be generated by employment growth, with the remaining 49 percent coming from separations.*

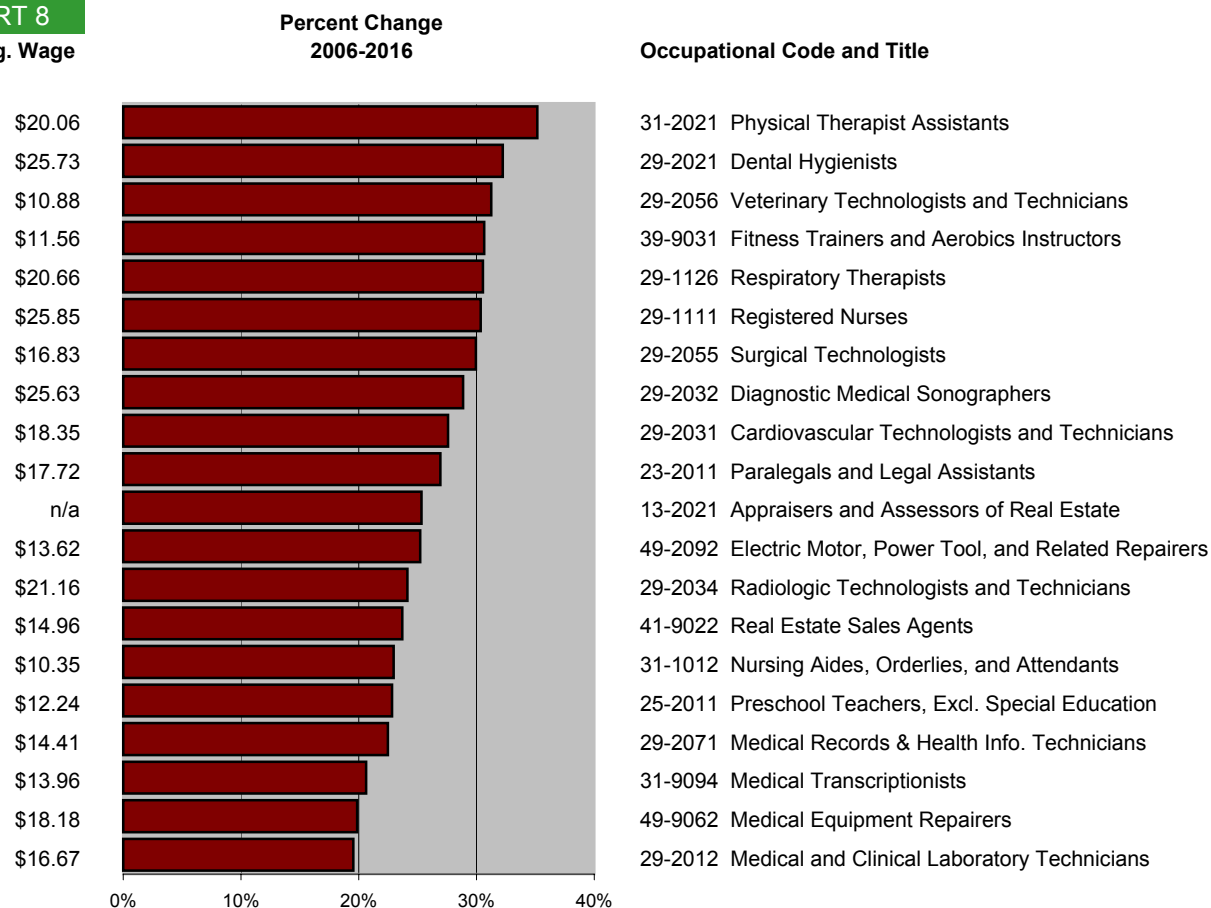
*Registered nurses are expected to provide nearly 2,100 total annual openings, more than twice as many as any other occupation in this category.*

\*Ranked according to the total number of job openings each year, this chart illustrates the top 20 occupations in Kentucky for which a person usually needs an associate's degree or postsecondary vocational training to perform the duties. The dark bar represents the number of job openings due to employment growth. The light bar represents job openings due to workers separating from the occupation.

Source: Kentucky Education and Workforce Development Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

## Twenty Fastest Growing Kentucky Occupations Generally Requiring an Associate's Degree or Postsecondary Vocational Training\*

**CHART 8**  
2007 Avg. Wage



*Occupations that require an associate's degree or postsecondary vocational training are projected to grow by 19.6 percent as a group between 2006 and 2016, making this the fastest growing education/training category.*

*Half of these occupations are classified as Healthcare Practitioners & Technical Occupations.*

*Physical therapist assistants top the list with the fastest growth rate in this group at over 3.5 times the average rate for all occupations.*

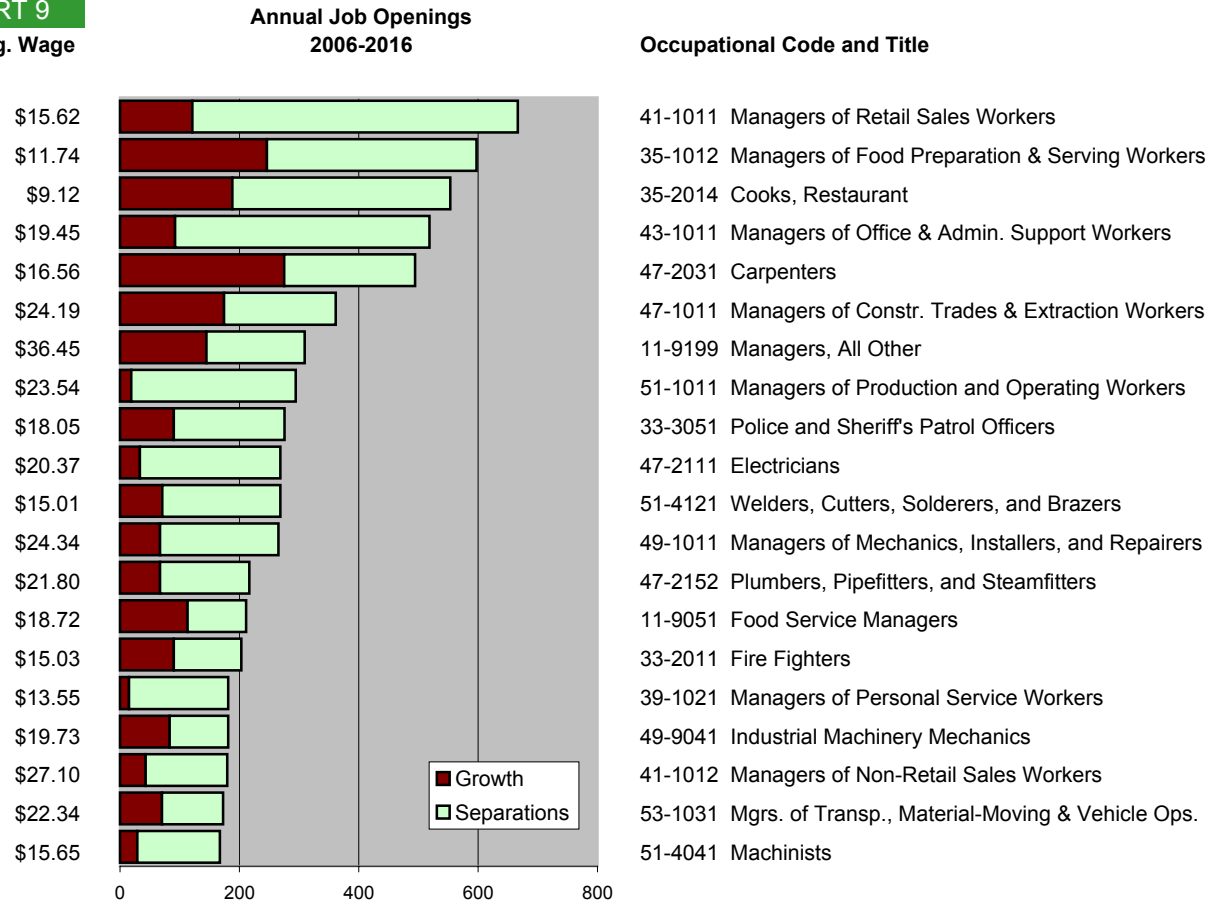
*The average annual wage for occupations in this category is approximately \$37,000 per year.*

\*Occupations with less than 20 projected job openings each year are not included in this chart.

Source: Kentucky Education and Workforce Development Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

## Twenty Kentucky Occupations with the Most Annual Job Openings Generally Requiring Work Experience in a Related Occupation or Long-Term On-The-Job Training\*

**CHART 9**  
2007 Avg. Wage



*There are over 130 occupations that generally require work experience in a related occupation or long-term on-the-job training, but these 20 represent over two-thirds of the projected total annual job openings in this category.*

*Approximately 32 percent of the total job openings in this category should be generated by employment growth, with the remaining 68 percent coming from separations.*

*Eighteen of the occupations listed are expected to experience more annual openings from separations than growth.*

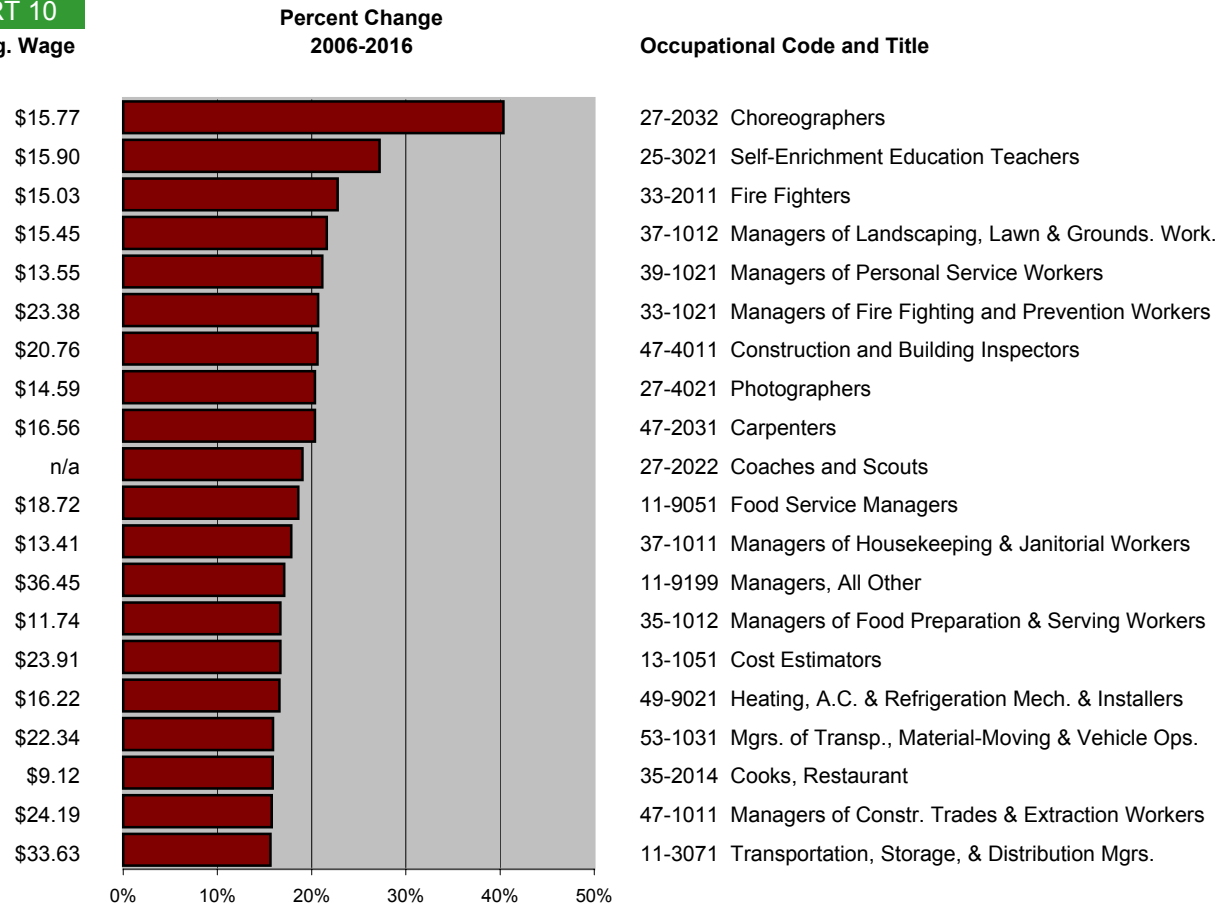
*Eleven of the occupations on this list are managerial.*

\*Ranked according to the total number of job openings each year, this chart illustrates the top 20 occupations in Kentucky for which a person usually needs work experience in a related occupation or long-term on-the-job training to perform the duties. The dark bar represents the number of job openings due to employment growth. The light bar represents job openings due to workers separating from the occupation.

Source: Kentucky Education and Workforce Development Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

## Twenty Fastest Growing Kentucky Occupations Generally Requiring Work Experience in a Related Occupation or Long-Term On-The-Job Training\*

**CHART 10**  
2007 Avg. Wage



*Occupations that require work experience in a related occupation or long-term on-the-job training are projected to grow by only 8.9 percent as a group between 2006 and 2016, which is less than the average for all occupations.*

*Half of the occupations on this list are managerial.*

*The average annual wage for occupations in this category is about \$39,600.*

*Eleven different major occupational categories are represented on this list.*

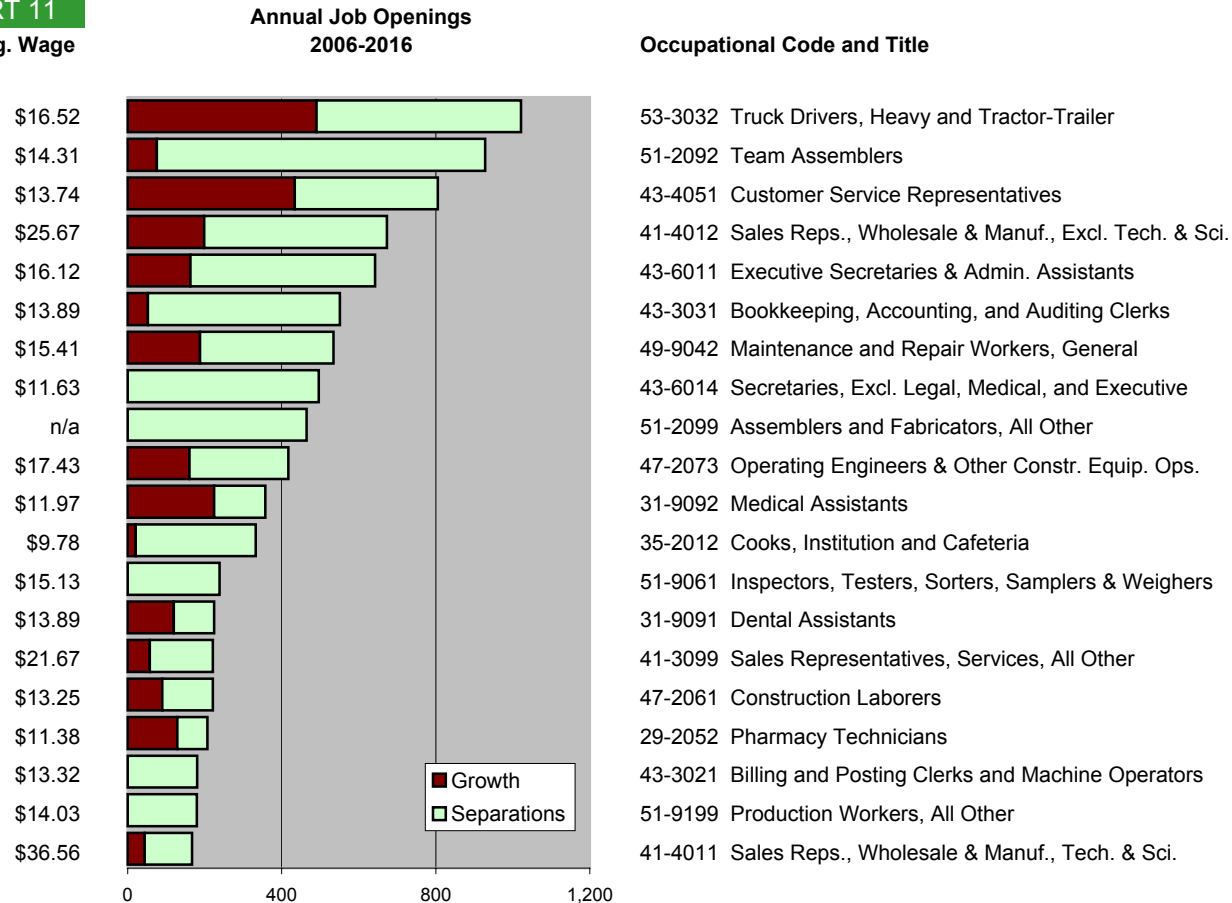
\*Occupations with less than 20 projected job openings each year are not included in this chart.

Source: Kentucky Education and Workforce Development Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch



## Twenty Kentucky Occupations with the Most Annual Job Openings Generally Requiring Work Experience in a Related Occupation or Moderate-Term On-The-Job Training\*

**CHART 11**  
2007 Avg. Wage



*There are over 180 occupations that generally require work experience in a related occupation or moderate-term on-the-job training, but these 20 represent nearly two-thirds of the projected total annual job openings in this category.*

*Approximately 25 percent of the total job openings in this category should be generated by employment growth, with the remaining 75 percent coming from separations.*

*Five of these occupations are actually expected to experience a decline in overall employment, but they still managed to make the list because of their large number of projected openings created by separations.*

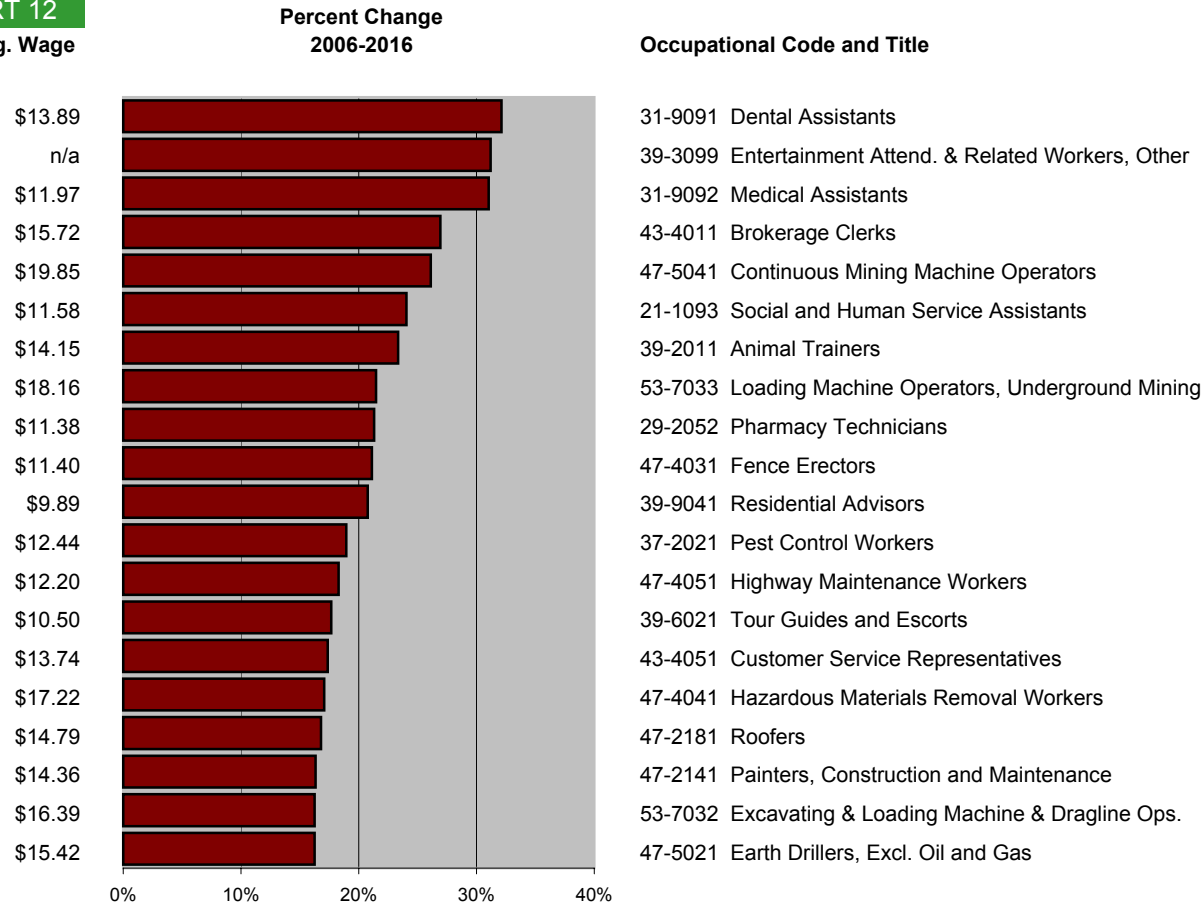
\*Ranked according to the total number of job openings each year, this chart illustrates the top 20 occupations in Kentucky for which a person usually needs work experience in a related occupation or moderate-term on-the-job training to perform the duties. The dark bar represents the number of job openings due to employment growth. The light bar represents job openings due to workers separating from the occupation.

Source: Kentucky Education and Workforce Development Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch



## Twenty Fastest Growing Kentucky Occupations Generally Requiring Work Experience in a Related Occupation or Moderate-Term On-The-Job Training\*

**CHART 12**  
2007 Avg. Wage



*Occupations that require work experience in a related occupation or moderate-term on-the-job training are projected to grow by only 4.7 percent as a group between 2006 and 2016, which is less than half the average rate for all occupations.*

*Seven of these 20 are classified as Construction and Extraction Occupations.*

*Fourteen of the occupations earn less than \$15 per hour, while none average more than \$20 per hour.*

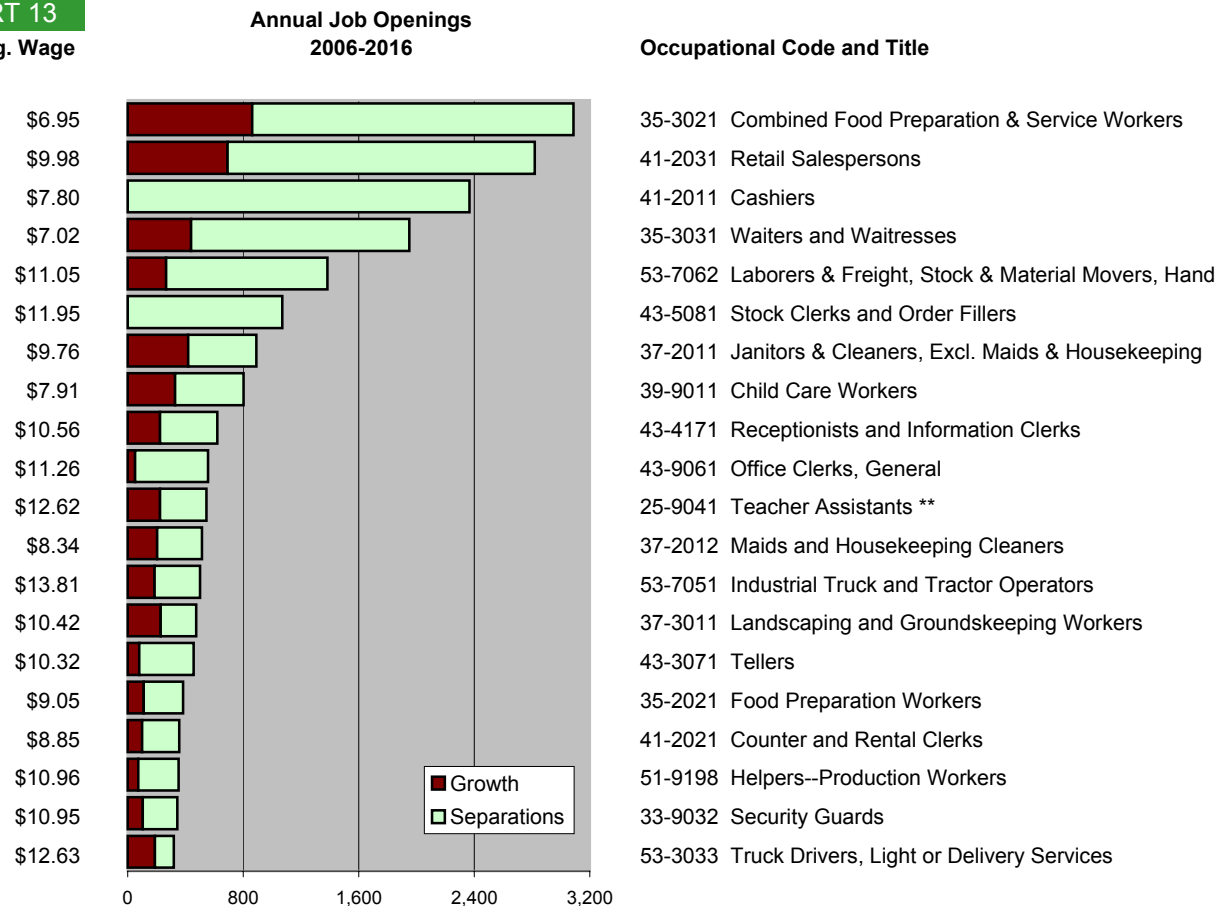
*The top occupation on this list, dental assistants, is projected to grow over three times faster than the average for all occupations.*

\*Occupations with less than 20 projected job openings each year are not included in this chart.

Source: Kentucky Education and Workforce Development Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

## Twenty Kentucky Occupations with the Most Annual Job Openings Generally Requiring Work Experience in a Related Occupation or Short-Term On-The-Job Training\*

**CHART 13**  
2007 Avg. Wage



*There are nearly 140 occupations that generally require work experience in a related occupation or short-term on-the-job training, but these 20 represent over 70 percent of the projected total annual job openings in this category.*

*Approximately 25 percent of the total job openings in this category should be generated by employment growth, with the remaining 75 percent coming from separations.*

*The four occupations with the most projected annual job openings are classified as Food Preparation & Serving Related Occupations or Sales and Related Occupations.*

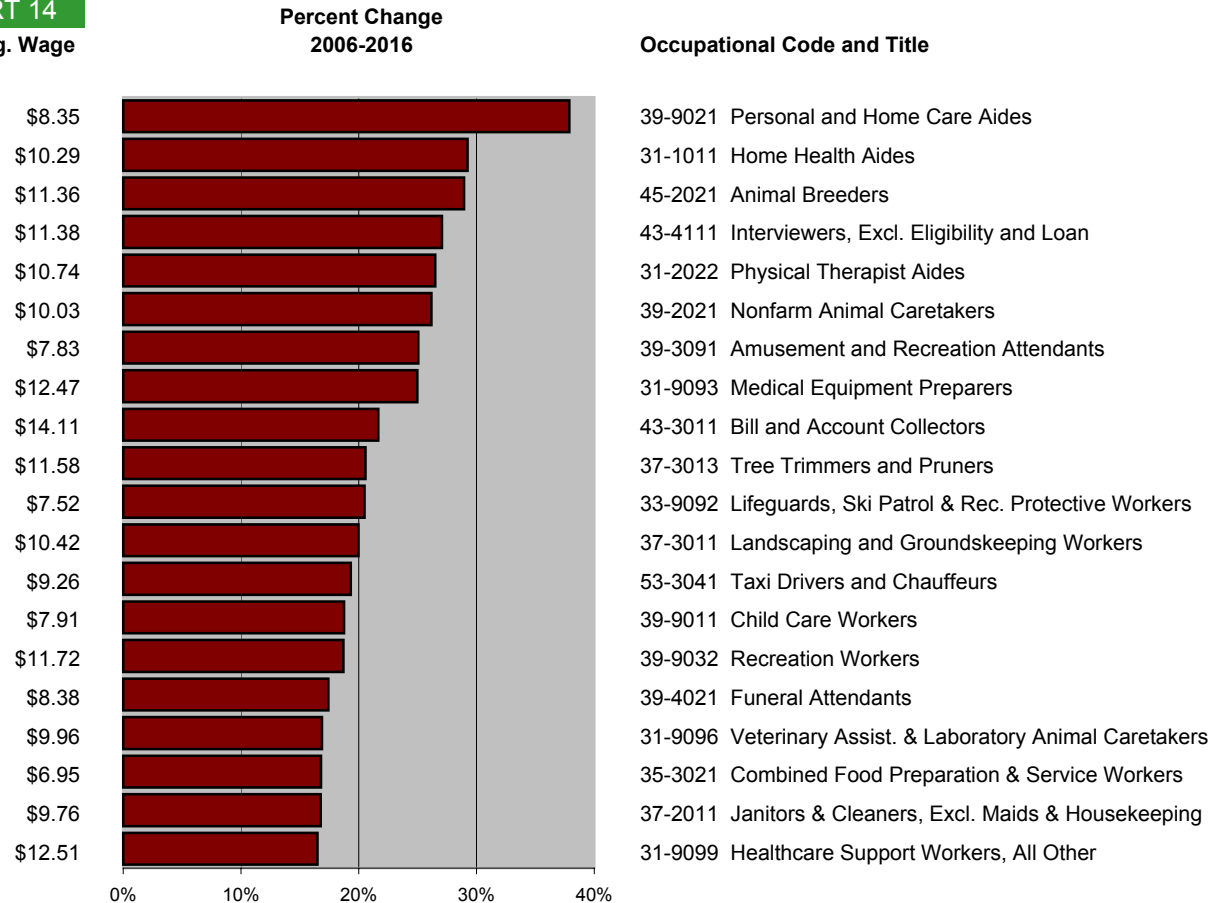
\*Ranked according to the total number of job openings each year, this chart illustrates the top 20 occupations in Kentucky for which a person usually needs work experience in a related occupation or short-term on-the-job training to perform the duties. The dark bar represents the number of job openings due to employment growth. The light bar represents job openings due to workers separating from the occupation.

\*\*Average hourly wages for teacher occupations were calculated by assuming 9.5 working months per year at 40 hours per week.

Source: Kentucky Education and Workforce Development Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

## Twenty Fastest Growing Kentucky Occupations Generally Requiring Work Experience in a Related Occupation or Short-Term On-The-Job Training\*

**CHART 14**  
2007 Avg. Wage



*Occupations that require work experience in a related occupation or short-term on-the-job training are projected to grow by 8.2 percent as a group between 2006 and 2016, which is significantly less than the average rate for all occupations.*

*Six of these are classified as Personal Care & Service Occupations, while another five are Healthcare Support Occupations.*

*Employers of these occupations often prefer candidates with a high school diploma, although it is not always required.*

*The average annual wage for occupations in this category is about \$21,200.*

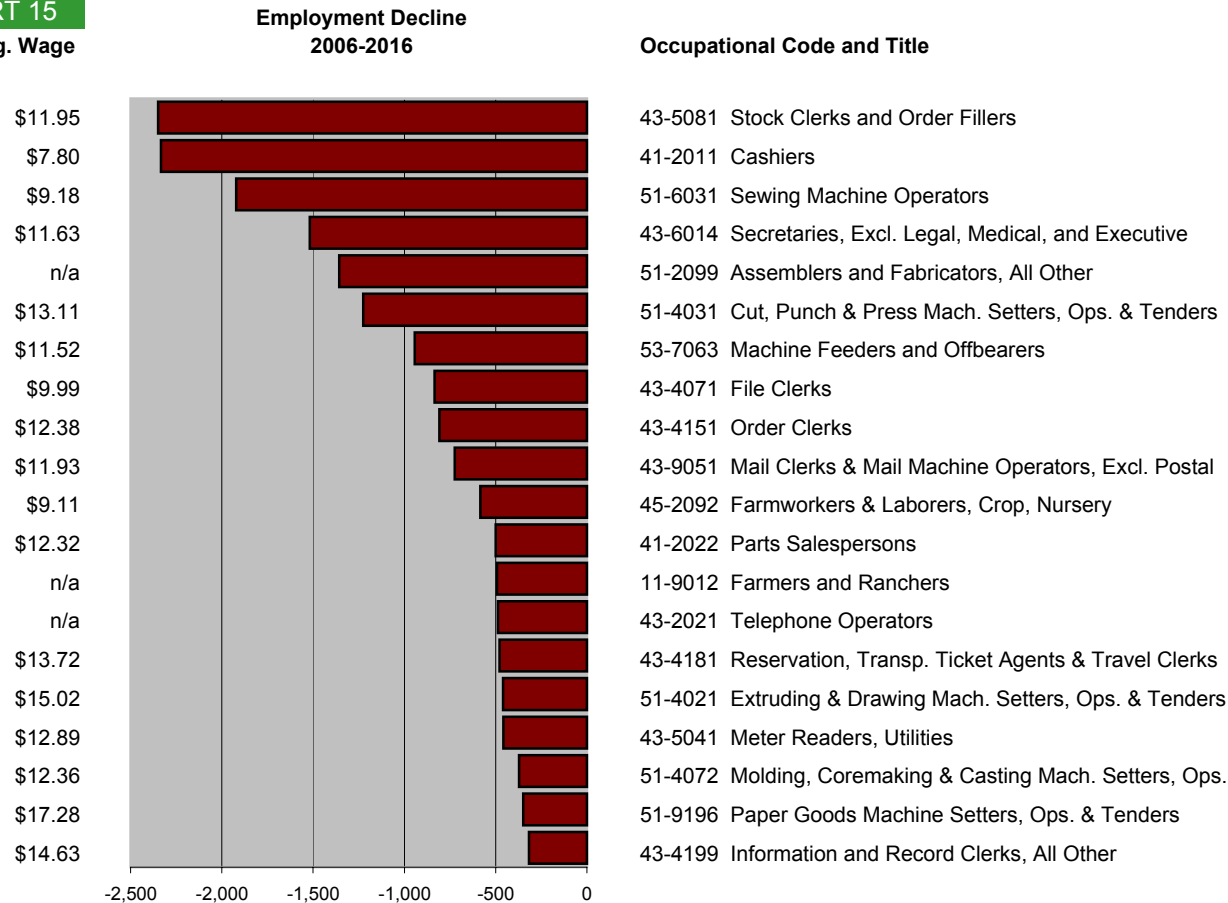
\*Occupations with less than 20 projected job openings each year are not included in this chart.

Source: Kentucky Education and Workforce Development Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

## Twenty Kentucky Occupations Losing the Largest Number of Jobs Between 2006 and 2016

**CHART 15**

2007 Avg. Wage



*A projected decline in employment generally implies that an occupation has an unfavorable outlook, but some openings could still be created as workers retire or separate from the job for other reasons.*

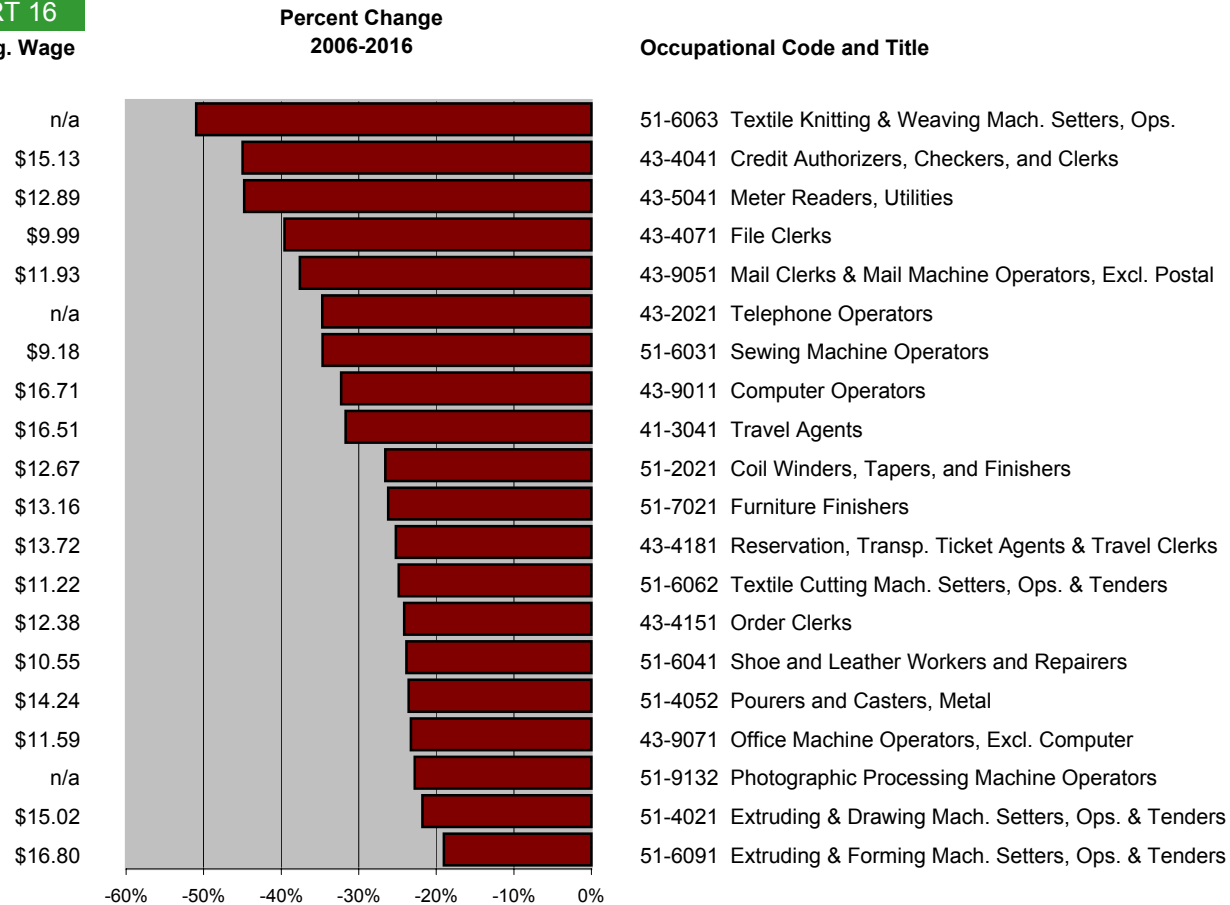
*Declining employment can be caused by a number of factors, including technological advancements that increase worker productivity, changes in consumer tastes, and outsourcing.*

*Nine of these occupations are Office and Administrative Support Occupations, while six more are Production Occupations. Much of the decline in these two occupational groups can be attributed to a growing reliance on computers, an increase in the automation of certain tasks, and outsourcing.*

Source: Kentucky Education and Workforce Development Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

## Twenty Fastest Declining Kentucky Occupations Between 2006 and 2016\*

**CHART 16**  
2007 Avg. Wage



*Nineteen of these 20 occupations require only long-term, moderate-term, or short-term on-the-job training, which means that employment decline in these jobs will have the greatest impact on those workers with the least amount of education and/or training.*

*The lone remaining occupation, travel agents, generally requires a postsecondary vocational award.*

*Nineteen of the occupations on this list are classified as either Production Occupations or Office and Administrative Support Occupations.*

*Thirteen of these occupations, including all of the top ten, also made this list in the 2004-2014 round of projections.*

\*Occupations with estimated statewide employment of less than 100 in 2006 or projected statewide employment of less than 100 in 2016 were not included in this chart.

Source: Kentucky Education and Workforce Development Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

## Explanation of Data Elements in the Occupational Outlook Table

# Occupational Employment Outlook

| Occupational  |       | Employment<br>2006      2016  |  | Job Growth<br>2006      2016  |         | Average Annual<br>Job Openings   |             | Average<br>Wage   | Education/<br>Training<br>Required  |
|---|-------|---|--|---|---------|--|-------------|---|---|
| Code  | Title | Estimated   |  | Number  | Percent | Growth   | Separations | 2007  |   |
| <b>Occupational Codes &amp; Titles</b><br>used in this report are based on the Standard Occupational Coding (SOC) structure.<br><br><b>NOTE:</b><br><br>Alphabetical listing beginning on page 64 will help locate a specific occupation within the tables. |       | <b>Estimated</b><br>2006 employment is based on the Occupational Employment Statistics (OES) Survey of employers.<br><br><b>Projected</b><br>2016 levels of occupational employment are based on projections of industry employment and projections of occupational change factors between 2006 and 2016.<br><br><b>NOTE:</b><br><br>The occupational employment estimates for 2006 to 2016 include all classes of workers such as public and private, wage and salaried workers; agricultural workers; private household workers; and self-employed. |  | <b>Number</b><br>The total number of jobs in an occupation gained or lost over the 2006 to 2016 period.<br><br><b>Percent</b><br>Percent change in employment in an occupation over the 10 year period.<br><br><b>NOTE:</b><br><br>In Kentucky, the average growth for all occupations is projected to be 9.8 percent between 2006-2016.<br><br>The growth of an occupation is classified as one of the following based on its percent change:<br><br>1) Declining (< 0%)<br><br>2) Stable (0% - 5.99%)<br><br>3) Growing (6% - 11.99%)<br><br>4) Fast Growing (12% - 17.99%)<br><br>5) Very Fast Growing (> 18%) |         | <b>Growth</b><br>Provides estimates of the average number of job openings expected to occur each year between 2006 and 2016.<br><br><b>Separations</b><br>Provides estimates of the average number of job openings expected to occur each year in an occupation from workers separating or leaving for reasons such as retirement, promotion, or simply transferring among occupations. These separations would require replacement workers.<br><br><b>Total</b><br>The sum of openings due to <b>growth</b> and openings due to <b>separations</b> for an occupation.<br><br><b>NOTE:</b><br><br>If employment growth is negative, the total number of job openings will equal the number of separations. |             | <b>Average Wage</b><br>in this report always refers to the 2007 mean hourly wage.<br><br><b>NOTE:</b><br><br>Average hourly wages for each of the teacher occupations in this report were calculated from the average annual wage by assuming 9.5 working months per year at 40 hours per week. | <b>Education and/or Training Levels Required</b><br>are developed by the Bureau of Labor Statistics and group occupations into eleven categories (1-11).<br><br><b>NOTE:</b><br><br>The various categories are described in detail on page 76 of this report. |

# Kentucky Statewide Occupational Employment Outlook

## Management Occupations

| Occupational                   |   | Employment* |           | Change    |         | Job Openings             |             |        | Average | Educ/    |
|--------------------------------|---|-------------|-----------|-----------|---------|--------------------------|-------------|--------|---------|----------|
| Code                           | Title   | 2006        | 2016      | 2006-2016 |         | Average Annual 2006-2016 |             |        | Wage    | Training |
|                                |   | Estimated   | Projected | Number    | Percent | Growth                   | Separations | Total  | 2007    | Req'd~   |
| 00-0000 Total, All Occupations |   | 1,981,056   | 2,175,207 | 194,151   | 9.80    | 19,415                   | 47,692      | 67,107 | 16.49   | n/a      |
| 11-0000 Management Occupations |   | 116,168     | 129,702   | 13,534    | 11.65   | 1,353                    | 2,003       | 3,357  | 37.63   | n/a      |
| 11-1000                        | Top Executives                                | 37,951      | 42,537    | 4,586     | 12.08   | 459                      | 716         | 1,175  | n/a     | n/a      |
| 11-1011                        | Chief Executives                              | 7,601       | 8,505     | 904       | 11.89   | 90                       | 143         | 233    | 65.38   | 4        |
| 11-1021                        | General and Operations Managers               | 30,318      | 34,000    | 3,682     | 12.14   | 368                      | 572         | 940    | 38.58   | 4        |
| 11-1031                        | Legislators                                   | *           | *         | *         | *       | *                        | *           | *      | n/a     | 4        |
| 11-2000                        | Adv., Market., Promo., P.R. & Sales Managers  | 5,602       | 6,287     | 685       | 12.23   | 69                       | 103         | 172    | n/a     | n/a      |
| 11-2011                        | Advertising and Promotions Managers           | 332         | 391       | 59        | 17.77   | 6                        | 6           | 12     | 29.31   | 4        |
| 11-2021                        | Marketing Managers                            | 1,550       | 1,744     | 194       | 12.52   | 19                       | 29          | 48     | 41.91   | 4        |
| 11-2022                        | Sales Managers                                | 3,109       | 3,442     | 333       | 10.71   | 33                       | 57          | 90     | 43.15   | 4        |
| 11-2031                        | Public Relations Managers                     | 611         | 710       | 99        | 16.20   | 10                       | 11          | 21     | 33.61   | 4        |
| 11-3000                        | Operations Specialties Managers               | 18,272      | 20,299    | 2,027     | 11.09   | 204                      | 316         | 520    | n/a     | n/a      |
| 11-3011                        | Administrative Services Managers              | 2,033       | 2,313     | 280       | 13.77   | 28                       | 40          | 68     | 28.62   | 4        |
| 11-3021                        | Computer and Information Systems Mgrs.        | 2,344       | 2,888     | 544       | 23.21   | 54                       | 43          | 97     | 40.38   | 4        |
| 11-3031                        | Financial Managers                            | 6,693       | 7,435     | 742       | 11.09   | 74                       | 96          | 170    | 39.19   | 4        |
| 11-3041                        | Compensation and Benefits Managers            | 416         | 468       | 52        | 12.50   | 5                        | 7           | 12     | 33.52   | 4        |
| 11-3042                        | Training and Development Managers             | 269         | 326       | 57        | 21.19   | 6                        | 5           | 11     | 31.71   | 4        |
| 11-3049                        | Human Resources Managers, All Other           | 1,054       | 1,186     | 132       | 12.52   | 13                       | 18          | 31     | 37.28   | 4        |
| 11-3051                        | Industrial Production Managers                | 3,111       | 3,098     | -13       | -0.42   | 0                        | 60          | 60     | 36.15   | 8        |
| 11-3061                        | Purchasing Managers                           | 949         | 963       | 14        | 1.48    | 1                        | 21          | 22     | 36.22   | 4        |
| 11-3071                        | Transportation, Storage, & Distribution Mgrs. | 1,403       | 1,622     | 219       | 15.61   | 22                       | 27          | 49     | 33.63   | 8        |
| 11-9000                        | Other Management Occupations                  | 54,343      | 60,579    | 6,236     | 11.48   | 624                      | 870         | 1,493  | n/a     | n/a      |
| 11-9011                        | Farm, Ranch, and Other Agricultural Mgrs.     | 2,633       | 2,659     | 26        | 0.01    | 3                        | 45          | 48     | 27.36   | 4        |
| 11-9012                        | Farmers and Ranchers                          | 10,996      | 10,504    | -492      | -4.47   | 0                        | 21          | 21     | n/a     | 9        |
| 11-9021                        | Construction Managers                         | 6,245       | 7,463     | 1,218     | 19.50   | 122                      | 113         | 235    | 30.65   | 5        |
| 11-9031                        | Education Admin., Preschool and Child Care    | 664         | 801       | 137       | 20.63   | 14                       | 17          | 31     | 19.15   | 4        |
| 11-9032                        | Education Admin., Elementary and Secondary    | 3,312       | 3,730     | 418       | 12.62   | 42                       | 82          | 124    | n/a     | 4        |
| 11-9033                        | Education Administrators, Postsecondary       | 1,169       | 1,302     | 133       | 11.38   | 13                       | 29          | 42     | 37.32   | 4        |
| 11-9039                        | Education Administrators, All Other           | 765         | 785       | 20        | 2.61    | 2                        | 19          | 21     | 27.23   | 4        |
| 11-9041                        | Engineering Managers                          | 1,683       | 1,852     | 169       | 10.04   | 17                       | 34          | 51     | 45.04   | 4        |
| 11-9051                        | Food Service Managers                         | 6,051       | 7,176     | 1,125     | 18.59   | 113                      | 99          | 212    | 18.72   | 8        |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch



# Kentucky Statewide Occupational Employment Outlook

## Management Occupations (cont'd)

| Occupational |   | Employment* |           | Change<br>2006-2016 |         | Job Openings<br>Average Annual 2006-2016 |             |       | Average<br>Wage<br>2007 | Educ/<br>Training<br>Req'd~ |
|--------------|---|-------------|-----------|---------------------|---------|--|-------------|-------|-------------------------|-----------------------------|
| Code         | Title   | Estimated   | Projected | Number              | Percent | Growth                                   | Separations | Total |                         |                             |
| 11-9061      | Funeral Directors                             | 1,168       | 1,260     | 92                  | 7.88    | 9  | 33          | 42    | 23.02                   | 6                           |
| 11-9081      | Lodging Managers                              | 726         | 839       | 113                 | 15.56   | 11                                       | 12          | 23    | 21.66                   | 8                           |
| 11-9111      | Medical and Health Services Managers          | 4,128       | 4,965     | 837                 | 20.28   | 84                                       | 81          | 165   | 36.05                   | 4                           |
| 11-9121      | Natural Sciences Managers                     | 231         | 241       | 10                  | 4.33    | 1  | 4           | 5     | 40.78                   | 4                           |
| 11-9131      | Postmasters and Mail Superintendents          | 697         | 682       | -15                 | -2.15   | 0  | 13          | 13    | 25.53                   | 8                           |
| 11-9141      | Property, Real Estate, Community Assoc. Mgrs. | 3,698       | 4,312     | 614                 | 16.60   | 61                                       | 69          | 130   | 21.41                   | 5                           |
| 11-9151      | Social and Community Service Managers         | 1,690       | 2,072     | 382                 | 22.60   | 38                                       | 32          | 70    | 22.88                   | 5                           |
| 11-9199      | Managers, All Other                           | 8,487       | 9,936     | 1,449               | 17.07   | 145                                      | 165         | 310   | 36.45                   | 8                           |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch



# Kentucky Statewide Occupational Employment Outlook

## Business & Financial Operations Occs.

| Occupational  |   | Employment*       |                   | Change              |                      | Job Openings |             |       | Average Wage<br>2007 | Educ/<br>Training<br>Req'd~ |
|---|---|-------------------|-------------------|---------------------|----------------------|--------------|-------------|-------|----------------------|-----------------------------|
| Code  | Title   | 2006<br>Estimated | 2016<br>Projected | 2006-2016<br>Number | 2006-2016<br>Percent | Growth       | Separations | Total |                      |                             |
| 13-0000 Business and Financial Operations Occupations |   | 61,748            | 70,823            | 9,075               | 14.70                | 919          | 1,117       | 2,036 | 24.25                | n/a                         |
| 13-1000   | Business Operations Specialists                       | 34,078            | 39,966            | 5,888               | 17.28                | 589          | 617         | 1,206 | n/a                  | n/a                         |
| 13-1011   | Agents & Mgrs.- Artists, Performers & Athletes        | *                 | *                 | *                   | *                    | *            | *           | *     | *                    | 4                           |
| 13-1021   | Purchasing Agents and Buyers, Farm Products           | 227               | 253               | 26                  | 11.45                | 3            | 8           | 11    | *                    | 8                           |
| 13-1022   | Wholesale & Retail Buyers, Excl. Farm Products        | 813               | 875               | 62                  | 7.63                 | 6            | 21          | 27    | 19.97                | 8                           |
| 13-1023   | Purchasing Agents, Excl. Wholesale, Retail & Farm     | 3,117             | 3,248             | 131                 | 4.20                 | 13           | 78          | 91    | 23.03                | 8                           |
| 13-1031   | Claims Adjusters, Examiners, and Investigators        | 2,870             | 3,288             | 418                 | 14.56                | 42           | 35          | 77    | 24.51                | 9                           |
| 13-1032   | Insurance Appraisers, Auto Damage                     | *                 | *                 | *                   | *                    | *            | *           | *     | 23.53                | 9                           |
| 13-1041   | Compliance Ofcr., Excl. Ag., Constr., Health & Trans. | 2,989             | 3,141             | 152                 | 5.09                 | 15           | 70          | 85    | 20.94                | 9                           |
| 13-1051   | Cost Estimators                                       | 2,129             | 2,484             | 355                 | 16.67                | 36           | 48          | 84    | 23.91                | 8                           |
| 13-1061   | Emergency Management Specialists                      | *                 | *                 | *                   | *                    | *            | *           | *     | 19.10                | 8                           |
| 13-1071   | Employment, Recruitment & Placement Specialists       | 1,929             | 2,336             | 407                 | 21.10                | 41           | 30          | 71    | 16.39                | 5                           |
| 13-1072   | Compensation, Benefits & Job Analysis Specialists     | 938               | 1,078             | 140                 | 14.93                | 14           | 14          | 28    | 22.00                | 5                           |
| 13-1073   | Training and Development Specialists                  | 2,103             | 2,501             | 398                 | 18.93                | 40           | 32          | 72    | 22.09                | 5                           |
| 13-1079   | Human Res., Trng. & Labor Relations Spec., Other      | 4,402             | 5,549             | 1,147               | 26.06                | 115          | 75          | 190   | 22.80                | 5                           |
| 13-1081   | Logisticians  | 740               | 797               | 57                  | 7.70                 | 6            | 13          | 19    | 29.01                | 5                           |
| 13-1111   | Management Analysts                                   | 3,136             | 3,820             | 684                 | 21.81                | 68           | 43          | 111   | 34.99                | 4                           |
| 13-1121   | Meeting and Convention Planners                       | 348               | 416               | 68                  | 19.54                | 7            | 8           | 15    | 19.14                | 5                           |
| 13-1199   | Business Operations Specialists, All Other            | 8,005             | 9,775             | 1,770               | 22.11                | 177          | 136         | 313   | 26.22                | 5                           |
| 13-2000   | Financial Specialists                                 | 27,670            | 30,857            | 3,187               | 11.52                | 330          | 501         | 831   | n/a                  | n/a                         |
| 13-2011   | Accountants and Auditors                              | 11,223            | 13,171            | 1,948               | 17.36                | 195          | 212         | 407   | 24.77                | 5                           |
| 13-2021   | Appraisers and Assessors of Real Estate               | 1,023             | 1,282             | 259                 | 25.32                | 26           | 22          | 48    | n/a                  | 7                           |
| 13-2031   | Budget Analysts                                       | 1,015             | 1,077             | 62                  | 6.11                 | 6            | 17          | 23    | n/a                  | 5                           |
| 13-2041   | Credit Analysts                                       | 293               | 289               | -4                  | -1.37                | 0            | 5           | 5     | 29.87                | 5                           |
| 13-2051   | Financial Analysts                                    | 1,082             | 1,317             | 235                 | 21.72                | 24           | 16          | 40    | 27.69                | 5                           |
| 13-2052   | Personal Financial Advisors                           | 1,416             | 1,905             | 489                 | 34.53                | 49           | 18          | 67    | 27.29                | 5                           |
| 13-2053   | Insurance Underwriters                                | 478               | 527               | 49                  | 10.25                | 5            | 9           | 14    | 22.85                | 5                           |
| 13-2061   | Financial Examiners                                   | 316               | 332               | 16                  | 5.06                 | 2            | 7           | 9     | 29.23                | 5                           |
| 13-2071   | Loan Counselors                                       | 214               | 237               | 23                  | 10.75                | 2            | 3           | 5     | 20.48                | 5                           |
| 13-2072   | Loan Officers   | 4,933             | 4,925             | -8                  | -0.16                | 0            | 79          | 79    | 23.23                | 5                           |
| 13-2081   | Tax Examiners, Collectors, and Revenue Agents         | 2,739             | 2,636             | -103                | -3.76                | 0            | 63          | 63    | 20.72                | 5                           |
| 13-2082   | Tax Preparers   | 1,196             | 1,222             | 26                  | 2.17                 | 3            | 20          | 23    | 14.94                | 10                          |
| 13-2099   | Financial Specialists, All Other                      | 1,742             | 1,937             | 195                 | 11.19                | 20           | 31          | 51    | 22.40                | 5                           |

# Kentucky Statewide Occupational Employment Outlook

## Computer & Mathematical Occupations

| Occupational                                  |  | Employment*       |                   | Change              |                      | Job Openings |             |       | Average Wage<br>2007 | Educ/<br>Training<br>Req'd~ |
|---|--|-------------------|-------------------|---------------------|----------------------|--------------|-------------|-------|----------------------|-----------------------------|
| Code  | Title  | 2006<br>Estimated | 2016<br>Projected | 2006-2016<br>Number | 2006-2016<br>Percent | Growth       | Separations | Total |                      |                             |
| 15-0000 Computer and Mathematical Occupations |  | 28,176            | 36,179            | 8,003               | 28.40                | 814          | 358         | 1,172 | 27.71                | n/a                         |
| 15-1000                                       | Computer Specialists                           | 27,652            | 35,619            | 7,967               | 28.81                | 810          | 344         | 1,154 | n/a                  | n/a                         |
| 15-1011                                       | Computer and Information Scientists, Research  | 102               | 130               | 28                  | 27.45                | 3            | 1           | 4     | 38.47                | 2                           |
| 15-1021                                       | Computer Programmers                           | 2,808             | 2,672             | -136                | -4.84                | 0            | 66          | 66    | 29.12                | 5                           |
| 15-1031                                       | Computer Software Engineers, Applications      | 3,282             | 4,658             | 1,376               | 41.93                | 138          | 33          | 171   | 31.63                | 5                           |
| 15-1032                                       | Computer Software Engineers, Systems Software  | 2,178             | 3,045             | 867                 | 39.81                | 87           | 22          | 109   | 33.94                | 5                           |
| 15-1041                                       | Computer Support Specialists                   | 5,109             | 6,098             | 989                 | 19.36                | 99           | 63          | 162   | 18.50                | 6                           |
| 15-1051                                       | Computer Systems Analysts                      | 5,006             | 6,399             | 1,393               | 27.83                | 139          | 57          | 196   | 32.24                | 5                           |
| 15-1061                                       | Database Administrators                        | 1,627             | 2,327             | 700                 | 43.02                | 70           | 17          | 87    | 28.83                | 5                           |
| 15-1071                                       | Network and Computer Systems Administrators    | 2,752             | 3,711             | 959                 | 34.85                | 96           | 31          | 127   | 25.60                | 5                           |
| 15-1081                                       | Network Systems & Data Communications Analysts | 3,223             | 4,846             | 1,623               | 50.36                | 162          | 38          | 200   | 30.04                | 5                           |
| 15-1099                                       | Computer Specialists, All Other                | 1,565             | 1,733             | 168                 | 10.73                | 17           | 18          | 35    | 27.84                | 6                           |
| 15-2000                                       | Mathematical Scientists                        | 524               | 560               | 36                  | 6.87                 | 4            | 14          | 18    | n/a                  | n/a                         |
| 15-2011                                       | Actuaries                                      | *                 | *                 | *                   | *                    | *            | *           | *     | 45.67                | 4                           |
| 15-2021                                       | Mathematicians                                 | *                 | *                 | *                   | *                    | *            | *           | *     | n/a                  | 2                           |
| 15-2031                                       | Operations Research Analysts                   | 337               | 367               | 30                  | 8.90                 | 3            | 7           | 10    | 29.35                | 3                           |
| 15-2041                                       | Statisticians                                  | *                 | *                 | *                   | *                    | *            | *           | *     | 29.29                | 3                           |
| 15-2099                                       | Mathematical Science Occupations, All Other    | *                 | *                 | *                   | *                    | *            | *           | *     | n/a                  | 3                           |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide Occupational Employment Outlook

## Architecture & Engineering Occupations

| Occupational  |   | Employment*   |               | Change<br>2006-2016 |              | Job Openings<br>Average Annual 2006-2016 |             |            | Average<br>Wage<br>2007 | Educ/<br>Training<br>Req'd~ |
|---|---|---------------|---------------|---------------------|--------------|--|-------------|------------|-------------------------|-----------------------------|
| Code  | Title   | Estimated     | Projected     | Number              | Percent      | Growth                                   | Separations | Total      |                         |                             |
| <b>17-0000 Architecture and Engineering Occupations</b> |   | <b>23,641</b> | <b>26,109</b> | <b>2,468</b>        | <b>10.44</b> | <b>264</b>                               | <b>541</b>  | <b>805</b> | <b>27.88</b>            | <b>n/a</b>                  |
| <b>17-1000</b>  | <b>Architects, Surveyors, and Cartographers</b>     | <b>2,192</b>  | <b>2,630</b>  | <b>438</b>          | <b>19.98</b> | <b>44</b>                                | <b>44</b>   | <b>88</b>  | <b>n/a</b>              | <b>n/a</b>                  |
| 17-1011   | Architects, Excl. Landscape and Naval               | 1,236         | 1,512         | 276                 | 22.33        | 28                                       | 14          | 42         | 29.94                   | 5                           |
| 17-1012   | Landscape Architects                                | 116           | 146           | 30                  | 25.86        | 3  | 1           | 4          | 22.91                   | 5                           |
| 17-1021   | Cartographers and Photogrammetrists                 | 223           | 249           | 26                  | 11.66        | 3  | 8           | 11         | 19.99                   | 5                           |
| 17-1022   | Surveyors   | 617           | 723           | 106                 | 17.18        | 11                                       | 21          | 32         | 20.91                   | 5                           |
| <b>17-2000</b>  | <b>Engineers</b>                                    | <b>13,410</b> | <b>14,785</b> | <b>1,375</b>        | <b>10.25</b> | <b>152</b>                               | <b>296</b>  | <b>448</b> | <b>n/a</b>              | <b>n/a</b>                  |
| 17-2011   | Aerospace Engineers                                 | *             | *             | *                   | *            | *  | *           | *          | n/a                     | 5                           |
| 17-2021   | Agricultural Engineers                              | 120           | 116           | -4                  | -3.33        | 0  | 4           | 4          | 28.15                   | 5                           |
| 17-2031   | Biomedical Engineers                                | *             | *             | *                   | *            | *  | *           | *          | 28.25                   | 5                           |
| 17-2041   | Chemical Engineers                                  | 516           | 545           | 29                  | 5.62         | 3  | 15          | 18         | 39.13                   | 5                           |
| 17-2051   | Civil Engineers                                     | 2,016         | 2,282         | 266                 | 13.19        | 27                                       | 32          | 59         | 32.86                   | 5                           |
| 17-2061   | Computer Hardware Engineers                         | 1,141         | 1,005         | -136                | -11.92       | 0  | 19          | 19         | n/a                     | 5                           |
| 17-2071   | Electrical Engineers                                | 1,142         | 1,286         | 144                 | 12.61        | 14                                       | 22          | 36         | 33.89                   | 5                           |
| 17-2072   | Electronics Engineers, Excl. Computer               | 712           | 820           | 108                 | 15.17        | 11                                       | 14          | 25         | 34.51                   | 5                           |
| 17-2081   | Environmental Engineers                             | 355           | 451           | 96                  | 27.04        | 10                                       | 6           | 16         | 29.69                   | 5                           |
| 17-2111   | Health & Safety Engineers., Excl. Mining Safety     | 409           | 457           | 48                  | 11.74        | 5  | 10          | 15         | 29.19                   | 5                           |
| 17-2112   | Industrial Engineers                                | 3,063         | 3,526         | 463                 | 15.12        | 46                                       | 74          | 120        | 29.99                   | 5                           |
| 17-2121   | Marine Engineers and Naval Architects               | *             | *             | *                   | *            | *  | *           | *          | n/a                     | 5                           |
| 17-2131   | Materials Engineers                                 | 206           | 216           | 10                  | 4.85         | 1  | 5           | 6          | 35.91                   | 5                           |
| 17-2141   | Mechanical Engineers                                | 2,277         | 2,487         | 210                 | 9.22         | 21                                       | 62          | 83         | 30.89                   | 5                           |
| 17-2151   | Mining & Geological Engineers., Incl. Mining Safety | 226           | 254           | 28                  | 12.39        | 3  | 7           | 10         | 34.14                   | 5                           |
| 17-2161   | Nuclear Engineers                                   | *             | *             | *                   | *            | *  | *           | *          | n/a                     | 5                           |
| 17-2171   | Petroleum Engineers                                 | *             | *             | *                   | *            | *  | *           | *          | 37.44                   | 5                           |
| 17-2199   | Engineers, All Other                                | 1,066         | 1,149         | 83                  | 7.79         | 8  | 20          | 28         | 32.57                   | 5                           |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide Occupational Employment Outlook

## Architecture & Engineering Occs. (cont'd)

| Occupational   |   | Employment*  |              | Change<br>2006-2016 |             | Job Openings<br>Average Annual 2006-2016 |             |            | Average<br>Wage<br>2007 | Educ/<br>Training<br>Req'd~ |
|----------------|---|--------------|--------------|---------------------|-------------|--|-------------|------------|-------------------------|-----------------------------|
| Code           | Title   | Estimated    | Projected    | Number              | Percent     | Growth                                   | Separations | Total      |                         |                             |
| <b>17-3000</b> | <b>Drafters, Engineering, and Mapping Technicians</b> | <b>8,039</b> | <b>8,694</b> | <b>655</b>          | <b>8.15</b> | <b>68</b>                                | <b>201</b>  | <b>269</b> | <b>n/a</b>              | <b>n/a</b>                  |
| 17-3011        | Architectural and Civil Drafters                      | 844          | 910          | 66                  | 7.82        | 7  | 24          | 31         | 18.41                   | 7                           |
| 17-3012        | Electrical and Electronics Drafters                   | 426          | 440          | 14                  | 3.29        | 1  | 12          | 13         | 20.00                   | 7                           |
| 17-3013        | Mechanical Drafters                                   | 888          | 1,005        | 117                 | 13.18       | 12                                       | 25          | 37         | 20.20                   | 7                           |
| 17-3019        | Drafters, All Other                                   | 296          | 277          | -19                 | -6.42       | 0  | 7           | 7          | 17.34                   | 7                           |
| 17-3021        | Aerospace Engineering and Operations Techs.           | *            | *            | *                   | *           | *  | *           | *          | n/a                     | 6                           |
| 17-3022        | Civil Engineering Technicians                         | 1,382        | 1,492        | 110                 | 7.96        | 11                                       | 29          | 40         | n/a                     | 6                           |
| 17-3023        | Electrical and Electronic Engineering Technicians     | 1,042        | 1,161        | 119                 | 11.42       | 12                                       | 22          | 34         | 21.47                   | 6                           |
| 17-3024        | Electro-Mechanical Technicians                        | *            | *            | *                   | *           | *  | *           | *          | 22.96                   | 6                           |
| 17-3025        | Environmental Engineering Technicians                 | 325          | 381          | 56                  | 17.23       | 6  | 7           | 13         | 19.78                   | 6                           |
| 17-3026        | Industrial Engineering Technicians                    | 684          | 723          | 39                  | 5.70        | 4  | 14          | 18         | 21.38                   | 6                           |
| 17-3027        | Mechanical Engineering Technicians                    | 304          | 323          | 19                  | 6.25        | 2  | 6           | 8          | 21.09                   | 6                           |
| 17-3029        | Engineering Techs., Except Drafters, All Other        | 793          | 849          | 56                  | 7.06        | 6  | 19          | 25         | 20.99                   | 6                           |
| 17-3031        | Surveying and Mapping Technicians                     | 921          | 1,002        | 81                  | 8.79        | 8  | 34          | 42         | 13.94                   | 10                          |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide Occupational Employment Outlook

## Life, Physical & Social Science Occupations

| Occupational  |  | Employment*   |               | Change<br>2006-2016 |              | Job Openings<br>Average Annual 2006-2016 |             |            | Average<br>Wage<br>2007 | Educ/<br>Training<br>Req'd~ |
|---|--|---------------|---------------|---------------------|--------------|--|-------------|------------|-------------------------|-----------------------------|
| Code  | Title  | Estimated     | Projected     | Number              | Percent      | Growth                                   | Separations | Total      |                         |                             |
| <b>19-0000 Life, Physical, and Social Science Occupations</b> |  | <b>12,004</b> | <b>13,684</b> | <b>1,680</b>        | <b>14.00</b> | <b>169</b>                               | <b>285</b>  | <b>454</b> | <b>23.19</b>            | <b>n/a</b>                  |
| <b>19-1000</b>  | <b>Life Scientists</b>                               | <b>2,443</b>  | <b>2,950</b>  | <b>507</b>          | <b>20.75</b> | <b>51</b>                                | <b>56</b>   | <b>107</b> | <b>n/a</b>              | <b>n/a</b>                  |
| 19-1011   | Animal Scientists                                    | *             | *             | *                   | *            | *  | *           | *          | n/a                     | 5                           |
| 19-1012   | Food Scientists and Technologists                    | 143           | 166           | 23                  | 16.08        | 2  | 3           | 5          | 30.86                   | 5                           |
| 19-1013   | Soil and Plant Scientists                            | 316           | 432           | 116                 | 36.71        | 12                                       | 6           | 18         | 22.12                   | 5                           |
| 19-1021   | Biochemists and Biophysicists                        | *             | *             | *                   | *            | *  | *           | *          | 22.18                   | 2                           |
| 19-1022   | Microbiologists                                      | *             | *             | *                   | *            | *  | *           | *          | 22.64                   | 2                           |
| 19-1023   | Zoologists and Wildlife Biologists                   | 152           | 159           | 7                   | 4.61         | 1  | 5           | 6          | n/a                     | 5                           |
| 19-1029   | Biological Scientists, All Other                     | 257           | 332           | 75                  | 29.18        | 8  | 8           | 16         | 27.53                   | 5                           |
| 19-1031   | Conservation Scientists                              | 307           | 366           | 59                  | 19.22        | 6  | 9           | 15         | 28.87                   | 5                           |
| 19-1032   | Foresters  | 224           | 237           | 13                  | 5.80         | 1  | 7           | 8          | n/a                     | 5                           |
| 19-1041   | Epidemiologists                                      | *             | *             | *                   | *            | *  | *           | *          | 22.96                   | 3                           |
| 19-1042   | Medical Scientists, Excl. Epidemiologists            | 678           | 847           | 169                 | 24.93        | 17                                       | 12          | 29         | n/a                     | 2                           |
| 19-1099   | Life Scientists, All Other                           | 119           | 134           | 15                  | 12.61        | 2  | 2           | 4          | 26.61                   | 5                           |
| <b>19-2000</b>  | <b>Physical Scientists</b>                           | <b>1,971</b>  | <b>2,111</b>  | <b>140</b>          | <b>7.10</b>  | <b>15</b>                                | <b>51</b>   | <b>66</b>  | <b>n/a</b>              | <b>n/a</b>                  |
| 19-2011   | Astronomers  | *             | *             | *                   | *            | *  | *           | *          | n/a                     | 2                           |
| 19-2012   | Physicists   | *             | *             | *                   | *            | *  | *           | *          | 45.43                   | 2                           |
| 19-2021   | Atmospheric and Space Scientists                     | *             | *             | *                   | *            | *  | *           | *          | 41.10                   | 5                           |
| 19-2031   | Chemists   | 778           | 773           | -5                  | -0.64        | 0  | 25          | 25         | 26.84                   | 5                           |
| 19-2032   | Materials Scientists                                 | *             | *             | *                   | *            | *  | *           | *          | 35.84                   | 5                           |
| 19-2041   | Environmental Scientists & Specialists, Incl. Health | 579           | 676           | 97                  | 16.75        | 10                                       | 10          | 20         | 26.00                   | 3                           |
| 19-2042   | Geoscientists, Excl. Hydrologists & Geographers      | 270           | 301           | 31                  | 11.48        | 3  | 5           | 8          | 29.52                   | 3                           |
| 19-2043   | Hydrologists   | *             | *             | *                   | *            | *  | *           | *          | 32.54                   | 3                           |
| 19-2099   | Physical Scientists, All Other                       | 103           | 109           | 6                   | 5.83         | 1  | 2           | 3          | 34.49                   | 5                           |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide Occupational Employment Outlook

## Life, Physical & Social Science Occs. (cont'd)

| Occupational   |   | Employment*  |              | Change<br>2006-2016 |              | Job Openings<br>Average Annual 2006-2016 |             |            | Average<br>Wage<br>2007 | Educ/<br>Training<br>Req'd~ |
|----------------|---|--------------|--------------|---------------------|--------------|--|-------------|------------|-------------------------|-----------------------------|
| Code           | Title   | Estimated    | Projected    | Number              | Percent      | Growth                                   | Separations | Total      |                         |                             |
| <b>19-3000</b> | <b>Social Scientists and Related Workers</b>          | <b>3,962</b> | <b>4,683</b> | <b>721</b>          | <b>18.20</b> | <b>72</b>                                | <b>95</b>   | <b>167</b> | <b>n/a</b>              | <b>n/a</b>                  |
| 19-3011        | Economists  | 139          | 146          | 7                   | 5.04         | 1  | 4           | 5          | 31.09                   | 3                           |
| 19-3021        | Market Research Analysts                              | 1,317        | 1,562        | 245                 | 18.60        | 25                                       | 34          | 59         | 27.98                   | 5                           |
| 19-3022        | Survey Researchers                                    | *            | *            | *                   | *            | *  | *           | *          | 20.64                   | 5                           |
| 19-3031        | Clinical, Counseling, and School Psychologists        | 1,510        | 1,896        | 386                 | 25.56        | 39                                       | 33          | 72         | 25.76                   | 2                           |
| 19-3039        | Psychologists, All Other                              | 227          | 244          | 17                  | 7.49         | 2  | 5           | 7          | 29.81                   | 3                           |
| 19-3051        | Urban and Regional Planners                           | 226          | 255          | 29                  | 12.83        | 3  | 8           | 11         | 21.36                   | 3                           |
| 19-3091        | Anthropologists and Archeologists                     | *            | *            | *                   | *            | *  | *           | *          | 25.04                   | 3                           |
| 19-3092        | Geographers   | *            | *            | *                   | *            | *  | *           | *          | n/a                     | 3                           |
| 19-3093        | Historians  | *            | *            | *                   | *            | *  | *           | *          | n/a                     | 3                           |
| 19-3094        | Political Scientists                                  | *            | *            | *                   | *            | *  | *           | *          | n/a                     | 3                           |
| 19-3099        | Social Scientists and Related Workers, All Other      | 390          | 418          | 28                  | 7.18         | 3  | 8           | 11         | 27.89                   | 3                           |
| <b>19-4000</b> | <b>Life, Physical, and Social Science Technicians</b> | <b>3,628</b> | <b>3,940</b> | <b>312</b>          | <b>8.60</b>  | <b>31</b>                                | <b>83</b>   | <b>114</b> | <b>n/a</b>              | <b>n/a</b>                  |
| 19-4011        | Agricultural and Food Science Technicians             | 202          | 213          | 11                  | 5.45         | 1  | 4           | 5          | 15.67                   | 6                           |
| 19-4021        | Biological Technicians                                | *            | *            | *                   | *            | *  | *           | *          | 15.11                   | 6                           |
| 19-4031        | Chemical Technicians                                  | 936          | 971          | 35                  | 3.74         | 4  | 23          | 27         | 18.91                   | 6                           |
| 19-4041        | Geological and Petroleum Technicians                  | *            | *            | *                   | *            | *  | *           | *          | n/a                     | 6                           |
| 19-4061        | Social Science Research Assistants                    | 186          | 218          | 32                  | 17.20        | 3  | 4           | 7          | 13.34                   | 6                           |
| 19-4091        | Environmental Sci. & Protection Techs., Incl. Health  | 677          | 725          | 48                  | 7.09         | 5  | 16          | 21         | 19.07                   | 6                           |
| 19-4092        | Forensic Science Technicians                          | 142          | 177          | 35                  | 24.65        | 4  | 3           | 7          | 16.59                   | 6                           |
| 19-4093        | Forest and Conservation Technicians                   | 233          | 238          | 5                   | 2.15         | 1  | 6           | 7          | 16.59                   | 6                           |
| 19-4099        | Life, Physical & Social Science Techs., All Other     | 728          | 816          | 88                  | 12.09        | 9  | 17          | 26         | 15.85                   | 6                           |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide Occupational Employment Outlook

## Community & Social Service Occupations

| Occupational                                      |   | Employment*       |                   | Change              |                      | Job Openings             |             |       | Average Wage<br>2007 | Educ/<br>Training<br>Req'd~ |
|---|---|-------------------|-------------------|---------------------|----------------------|--------------------------|-------------|-------|----------------------|-----------------------------|
| Code  | Title   | 2006<br>Estimated | 2016<br>Projected | 2006-2016<br>Number | 2006-2016<br>Percent | Average Annual 2006-2016 |             |       |                      |                             |
|   |   |                   |                   |                     |                      | Growth                   | Separations | Total |                      |                             |
| 21-0000 Community and Social Services Occupations |   | 35,842            | 40,529            | 4,687               | 13.08                | 469                      | 683         | 1,152 | 17.41                | n/a                         |
| 21-1000   | Counselors, Social Workers, Other Specialists     | 23,037            | 26,870            | 3,833               | 16.64                | 383                      | 433         | 816   | n/a                  | n/a                         |
| 21-1011   | Substance Abuse & Behavioral Disorder Couns.      | 482               | 597               | 115                 | 23.86                | 12                       | 11          | 23    | 18.00                | 3                           |
| 21-1012   | Educational, Vocational, and School Counselors    | 2,720             | 2,948             | 228                 | 8.38                 | 23                       | 62          | 85    | 23.75                | 3                           |
| 21-1013   | Marriage and Family Therapists                    | 318               | 406               | 88                  | 27.67                | 9                        | 7           | 16    | 17.47                | 3                           |
| 21-1014   | Mental Health Counselors                          | 971               | 1,237             | 266                 | 27.39                | 27                       | 22          | 49    | 16.97                | 3                           |
| 21-1015   | Rehabilitation Counselors                         | 1,535             | 1,727             | 192                 | 12.51                | 19                       | 35          | 54    | 17.30                | 3                           |
| 21-1019   | Counselors, All Other                             | *                 | *                 | *                   | *                    | *                        | *           | *     | 29.58                | 3                           |
| 21-1021   | Child, Family, and School Social Workers          | 7,872             | 8,648             | 776                 | 9.86                 | 78                       | 135         | 213   | n/a                  | 5                           |
| 21-1022   | Medical and Public Health Social Workers          | 1,372             | 1,735             | 363                 | 26.46                | 36                       | 24          | 60    | 18.75                | 5                           |
| 21-1023   | Mental Health & Substance Abuse Social Workers    | 1,728             | 2,242             | 514                 | 29.75                | 51                       | 30          | 81    | 17.72                | 3                           |
| 21-1029   | Social Workers, All Other                         | 433               | 493               | 60                  | 13.86                | 6                        | 8           | 14    | 16.67                | 5                           |
| 21-1091   | Health Educators                                  | 457               | 532               | 75                  | 16.41                | 8                        | 8           | 16    | 19.84                | 3                           |
| 21-1092   | Probation Officers & Correctional Treatment Spec. | 781               | 838               | 57                  | 7.30                 | 6                        | 14          | 20    | n/a                  | 5                           |
| 21-1093   | Social and Human Service Assistants               | 3,702             | 4,592             | 890                 | 24.04                | 89                       | 65          | 154   | 11.58                | 10                          |
| 21-1099   | Community & Social Service Specialists, All Other | 640               | 842               | 202                 | 31.56                | 20                       | 12          | 32    | 15.07                | 5                           |
| 21-2000   | Religious Workers                                 | 12,805            | 13,659            | 854                 | 6.67                 | 85                       | 250         | 335   | n/a                  | n/a                         |
| 21-2011   | Clergy  | 5,989             | 6,581             | 592                 | 9.88                 | 59                       | 123         | 182   | 19.67                | 3                           |
| 21-2021   | Directors, Religious Activities and Education     | *                 | *                 | *                   | *                    | *                        | *           | *     | 24.58                | 5                           |
| 21-2099   | Religious Workers, All Other                      | 6,805             | 7,066             | 261                 | 3.84                 | 26                       | 127         | 153   | n/a                  | 5                           |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide Occupational Employment Outlook

## Legal Occupations

| Occupational                     |  | Employment*   |               | Change<br>2006-2016 |              | Job Openings<br>Average Annual 2006-2016 |             |            | Average<br>Wage<br>2007 | Educ/<br>Training<br>Req'd~ |
|----------------------------------|--|---------------|---------------|---------------------|--------------|--|-------------|------------|-------------------------|-----------------------------|
| Code                             | Title  | Estimated     | Projected     | Number              | Percent      | Growth                                   | Separations | Total      |                         |                             |
| <b>23-0000 Legal Occupations</b> |  | <b>12,228</b> | <b>14,565</b> | <b>2,337</b>        | <b>19.11</b> | <b>236</b>                               | <b>138</b>  | <b>374</b> | <b>32.04</b>            | <b>n/a</b>                  |
| <b>23-1000</b>                   | <b>Lawyers, Judges, and Related Workers</b>      | <b>7,500</b>  | <b>8,787</b>  | <b>1,287</b>        | <b>17.16</b> | <b>131</b>                               | <b>96</b>   | <b>227</b> | <b>n/a</b>              | <b>n/a</b>                  |
| 23-1011                          | Lawyers  | 6,606         | 7,903         | 1,297               | 19.63        | 130                                      | 85          | 215        | 45.41                   | 1                           |
| 23-1021                          | Adm. Law Judges, Adjudicators & Hearing Officers | *             | *             | *                   | *            | *  | *           | *          | n/a                     | 4                           |
| 23-1022                          | Arbitrators, Mediators, and Conciliators         | *             | *             | *                   | *            | *  | *           | *          | 29.58                   | 4                           |
| 23-1023                          | Judges, Magistrate Judges, and Magistrates       | *             | *             | *                   | *            | *  | *           | *          | n/a                     | 4                           |
| <b>23-2000</b>                   | <b>Legal Support Workers</b>                     | <b>4,728</b>  | <b>5,778</b>  | <b>1,050</b>        | <b>22.21</b> | <b>105</b>                               | <b>42</b>   | <b>147</b> | <b>n/a</b>              | <b>n/a</b>                  |
| 23-2011                          | Paralegals and Legal Assistants                  | 3,378         | 4,288         | 910                 | 26.94        | 91                                       | 27          | 118        | 17.72                   | 6                           |
| 23-2091                          | Court Reporters                                  | *             | *             | *                   | *            | *  | *           | *          | 16.56                   | 7                           |
| 23-2092                          | Law Clerks                                       | 370           | 408           | 38                  | 10.27        | 4  | 4           | 8          | 14.74                   | 5                           |
| 23-2093                          | Title Examiners, Abstractors, and Searchers      | 269           | 291           | 22                  | 8.18         | 2  | 3           | 5          | 15.28                   | 10                          |
| 23-2099                          | Legal Support Workers, All Other                 | 640           | 707           | 67                  | 10.47        | 7  | 7           | 14         | 18.26                   | 5                           |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch



# Kentucky Statewide Occupational Employment Outlook

## Education, Training & Library Occupations

| Occupational  |  | Employment*    |                | Change<br>2006-2016 |              | Job Openings<br>Average Annual 2006-2016 |              |              | Average<br>Wage<br>2007 | Educ/<br>Training<br>Req'd~ |
|---|--|----------------|----------------|---------------------|--------------|--|--------------|--------------|-------------------------|-----------------------------|
| Code  | Title  | Estimated      | Projected      | Number              | Percent      | Growth                                   | Separations  | Total        |                         |                             |
| <b>25-0000 Education, Training, and Library Occupations</b> |  | <b>103,093</b> | <b>119,034</b> | <b>15,941</b>       | <b>15.46</b> | <b>1,594</b>                             | <b>2,131</b> | <b>3,725</b> | <b>19.13</b>            | <b>n/a</b>                  |
| <b>25-1000</b>  | <b>Postsecondary Teachers</b>                      | <b>17,777</b>  | <b>21,126</b>  | <b>3,349</b>        | <b>18.84</b> | <b>335</b>                               | <b>401</b>   | <b>736</b>   | <b>n/a</b>              | <b>n/a</b>                  |
| 25-1011   | Business Teachers, Postsecondary **                | 707            | 843            | 136                 | 19.24        | 14                                       | 16           | 30           | 41.82                   | 3                           |
| 25-1021   | Computer Science Teachers, Postsecondary **        | 473            | 567            | 94                  | 19.87        | 9  | 11           | 20           | 36.99                   | 3                           |
| 25-1022   | Mathematical Science Teachers, Postsecondary **    | 710            | 856            | 146                 | 20.56        | 15                                       | 16           | 31           | 32.23                   | 3                           |
| 25-1031   | Architecture Teachers, Postsecondary **            | *              | *              | *                   | *            | *  | *            | *            | n/a                     | 2                           |
| 25-1032   | Engineering Teachers, Postsecondary **             | 267            | 317            | 50                  | 18.73        | 5  | 6            | 11           | n/a                     | 2                           |
| 25-1041   | Agricultural Sciences Teachers, Postsecondary **   | 214            | 242            | 28                  | 13.08        | 3  | 5            | 8            | n/a                     | 2                           |
| 25-1042   | Biological Science Teachers, Postsecondary **      | 560            | 674            | 114                 | 20.36        | 11                                       | 13           | 24           | 38.84                   | 2                           |
| 25-1043   | Forestry & Conservation Sci. Teachers, Post. **    | *              | *              | *                   | *            | *  | *            | *            | n/a                     | 2                           |
| 25-1051   | Atmospheric, Earth, Marine & Space Sci., Post. **  | *              | *              | *                   | *            | *  | *            | *            | 39.18                   | 2                           |
| 25-1052   | Chemistry Teachers, Postsecondary **               | 266            | 318            | 52                  | 19.55        | 5  | 6            | 11           | 37.34                   | 2                           |
| 25-1054   | Physics Teachers, Postsecondary **                 | 183            | 219            | 36                  | 19.67        | 4  | 4            | 8            | 39.69                   | 2                           |
| 25-1061   | Anthropology and Archeology Teachers, Post. **     | *              | *              | *                   | *            | *  | *            | *            | 34.03                   | 2                           |
| 25-1062   | Area, Ethnic & Cultural Studies Teachers, Post. ** | *              | *              | *                   | *            | *  | *            | *            | 38.45                   | 2                           |
| 25-1063   | Economics Teachers, Postsecondary **               | 189            | 226            | 37                  | 19.58        | 4  | 4            | 8            | 49.37                   | 2                           |
| 25-1064   | Geography Teachers, Postsecondary **               | *              | *              | *                   | *            | *  | *            | *            | 30.16                   | 2                           |
| 25-1065   | Political Science Teachers, Postsecondary **       | 259            | 307            | 48                  | 18.53        | 5  | 6            | 11           | 33.17                   | 2                           |
| 25-1066   | Psychology Teachers, Postsecondary **              | 512            | 618            | 106                 | 20.70        | 11                                       | 12           | 23           | 34.28                   | 2                           |
| 25-1067   | Sociology Teachers, Postsecondary **               | 160            | 193            | 33                  | 20.63        | 3  | 4            | 7            | 33.41                   | 2                           |
| 25-1069   | Social Sciences Teachers, Post., All Other **      | 223            | 267            | 44                  | 19.73        | 4  | 5            | 9            | n/a                     | 2                           |
| 25-1071   | Health Specialties Teachers, Postsecondary **      | 2,175          | 2,592          | 417                 | 19.17        | 42                                       | 49           | 91           | 63.46                   | 3                           |
| 25-1072   | Nursing Instructors & Teachers, Postsecondary **   | 683            | 817            | 134                 | 19.62        | 13                                       | 15           | 28           | 34.82                   | 2                           |
| 25-1081   | Education Teachers, Postsecondary **               | 908            | 1,081          | 173                 | 19.05        | 17                                       | 21           | 38           | 32.50                   | 2                           |
| 25-1082   | Library Science Teachers, Postsecondary **         | *              | *              | *                   | *            | *  | *            | *            | n/a                     | 2                           |
| 25-1111   | Crim. Justice & Law Enforcement Teachers, Post. ** | *              | *              | *                   | *            | *  | *            | *            | n/a                     | 2                           |
| 25-1112   | Law Teachers, Postsecondary **                     | 156            | 186            | 30                  | 19.23        | 3  | 4            | 7            | 55.48                   | 1                           |
| 25-1113   | Social Work Teachers, Postsecondary **             | 223            | 266            | 43                  | 19.28        | 4  | 5            | 9            | 33.57                   | 2                           |
| 25-1121   | Art, Drama, and Music Teachers, Postsecondary **   | 955            | 1,153          | 198                 | 20.73        | 20                                       | 22           | 42           | 32.93                   | 3                           |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch  
\*\* Average hourly wages for these teacher occupations were calculated by assuming 9.5 working months per year at 40 hours per week.

# Kentucky Statewide Occupational Employment Outlook

## Education, Training & Library Occs. (cont'd)

| Occupational |   | Employment* |           | Change    |         | Job Openings             |             |       | Average | Educ/    |
|--------------|---|-------------|-----------|-----------|---------|--------------------------|-------------|-------|---------|----------|
| Code         | Title   | 2006        | 2016      | 2006-2016 |         | Average Annual 2006-2016 |             |       | Wage    | Training |
|              |   | Estimated   | Projected | Number    | Percent | Growth                   | Separations | Total | 2007    | Req'd~   |
| 25-1122      | Communications Teachers, Postsecondary **           | 523         | 625       | 102       | 19.50   | 10                       | 12          | 22    | 32.27   | 2        |
| 25-1123      | English Language & Lit. Teachers, Post. **          | 923         | 1,106     | 183       | 19.83   | 18                       | 21          | 39    | 30.46   | 3        |
| 25-1124      | Foreign Language and Literature Teachers, Post. **  | 268         | 321       | 53        | 19.78   | 5                        | 6           | 11    | n/a     | 3        |
| 25-1125      | History Teachers, Postsecondary **                  | 353         | 423       | 70        | 19.83   | 7                        | 8           | 15    | 31.95   | 2        |
| 25-1126      | Philosophy and Religion Teachers, Post. **          | 251         | 299       | 48        | 19.12   | 5                        | 6           | 11    | 33.69   | 2        |
| 25-1191      | Graduate Teaching Assistants                        | 269         | 319       | 50        | 18.59   | 5                        | 6           | 11    | n/a     | 5        |
| 25-1192      | Home Economics Teachers, Postsecondary **           | 120         | 144       | 24        | 20.00   | 2                        | 3           | 5     | 29.88   | 3        |
| 25-1193      | Recreation and Fitness Studies Teachers, Post. **   | 137         | 164       | 27        | 19.71   | 3                        | 3           | 6     | 31.41   | 3        |
| 25-1194      | Vocational Education Teachers, Postsecondary        | 2,803       | 3,161     | 358       | 12.77   | 36                       | 63          | 99    | 20.52   | 4        |
| 25-1199      | Postsecondary Teachers, All Other **                | 1,793       | 2,204     | 411       | 22.92   | 41                       | 41          | 82    | 28.29   | 2        |
| 25-2000      | Primary, Secondary & Special Ed. Teachers           | 48,626      | 56,140    | 7,514     | 15.45   | 751                      | 1,094       | 1,845 | n/a     | n/a      |
| 25-2011      | Preschool Teachers, Excl. Special Education         | 4,339       | 5,330     | 991       | 22.84   | 99                       | 52          | 151   | n/a     | 7        |
| 25-2012      | Kindergarten Teachers, Excl. Special Education **   | 1,570       | 1,879     | 309       | 19.68   | 31                       | 19          | 50    | 26.16   | 5        |
| 25-2021      | Elementary School Teachers, Excl. Special Ed. **    | 17,469      | 20,047    | 2,578     | 14.76   | 258                      | 386         | 644   | 25.90   | 5        |
| 25-2022      | Middle School Teachers, Excl. Special & Voc. Ed. ** | 7,223       | 7,920     | 697       | 9.65    | 70                       | 159         | 229   | 26.55   | 5        |
| 25-2023      | Vocational Education Teachers, Middle School **     | *           | *         | *         | *       | *                        | *           | *     | 29.28   | 4        |
| 25-2031      | Sec. School Teachers, Excl. Special and Voc. Ed. ** | 10,993      | 12,357    | 1,364     | 12.41   | 136                      | 309         | 445   | 27.20   | 5        |
| 25-2032      | Vocational Ed. Teachers, Secondary School **        | 501         | 562       | 61        | 12.18   | 6                        | 14          | 20    | 29.31   | 4        |
| 25-2041      | Spec. Ed. Teachers, Pre., Kinder. & Elem. School ** | 3,082       | 3,886     | 804       | 26.09   | 80                       | 74          | 154   | 25.58   | 5        |
| 25-2042      | Special Education Teachers, Middle School **        | 1,548       | 1,909     | 361       | 23.32   | 36                       | 37          | 73    | 25.84   | 5        |
| 25-2043      | Special Education Teachers, Secondary School **     | 1,868       | 2,214     | 346       | 18.52   | 35                       | 45          | 80    | 26.80   | 5        |
| 25-3000      | Other Teachers and Instructors                      | 11,614      | 13,688    | 2,074     | 17.86   | 207                      | 143         | 350   | n/a     | n/a      |
| 25-3011      | Adult Literacy, Remedial Ed. & GED Teachers         | 1,149       | 1,367     | 218       | 18.97   | 22                       | 14          | 36    | 16.38   | 5        |
| 25-3021      | Self-Enrichment Education Teachers                  | 1,025       | 1,304     | 279       | 27.22   | 28                       | 13          | 41    | 15.90   | 8        |
| 25-3099      | Teachers and Instructors, All Other **              | 9,440       | 11,017    | 1,577     | 16.71   | 158                      | 116         | 274   | 13.24   | 5        |
| 25-4000      | Librarians, Curators, and Archivists                | 3,389       | 3,581     | 192       | 5.67    | 19                       | 94          | 113   | n/a     | n/a      |
| 25-4011      | Archivists  | *           | *         | *         | *       | *                        | *           | *     | 19.01   | 3        |
| 25-4012      | Curators  | 130         | 139       | 9         | 6.92    | 1                        | 3           | 4     | 20.14   | 3        |
| 25-4013      | Museum Technicians and Conservators                 | *           | *         | *         | *       | *                        | *           | *     | 15.52   | 3        |
| 25-4021      | Librarians  | 2,155       | 2,232     | 77        | 3.57    | 8                        | 51          | 59    | 22.73   | 3        |
| 25-4031      | Library Technicians                                 | 1,016       | 1,116     | 100       | 9.84    | 10                       | 38          | 48    | 11.92   | 7        |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch  
\*\* Average hourly wages for these teacher occupations were calculated by assuming 9.5 working months per year at 40 hours per week.

# Kentucky Statewide Occupational Employment Outlook

## Education, Training & Library Occs. (cont'd)

| Occupational   |   | Employment*   |               | Change<br>2006-2016 |              | Job Openings<br>Average Annual 2006-2016 |             |            | Average<br>Wage<br>2007 | Educ/<br>Training<br>Req'd~ |
|----------------|---|---------------|---------------|---------------------|--------------|--|-------------|------------|-------------------------|-----------------------------|
| Code           | Title   | Estimated     | Projected     | Number              | Percent      | Growth                                   | Separations | Total      |                         |                             |
| <b>25-9000</b> | <b>Other Education, Training, and Library Occupations</b> | <b>21,687</b> | <b>24,499</b> | <b>2,812</b>        | <b>12.97</b> | <b>281</b>                               | <b>399</b>  | <b>680</b> | <b>n/a</b>              | <b>n/a</b>                  |
| 25-9011        | Audio-Visual Collections Specialists                      | *             | *             | *                   | *            | *  | *           | *          | n/a                     | 10                          |
| 25-9021        | Farm and Home Management Advisors                         | 616           | 641           | 25                  | 4.06         | 3  | 9           | 12         | n/a                     | 5                           |
| 25-9031        | Instructional Coordinators                                | 1,745         | 2,002         | 257                 | 14.73        | 26                                       | 27          | 53         | 26.24                   | 3                           |
| 25-9041        | Teacher Assistants **                                     | 16,788        | 19,020        | 2,232               | 13.30        | 223                                      | 324         | 547        | 12.62                   | 11                          |
| 25-9099        | Education, Training, and Library Workers, All Other       | 2,521         | 2,817         | 296                 | 11.74        | 30                                       | 38          | 68         | 19.32                   | 5                           |

\* Employment under 100 and unreliable data suppressed

n/a - Not Available

~ Education/Training Required Codes- Page 76

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

\*\* Average hourly wages for these teacher occupations were calculated by assuming 9.5 working months per year at 40 hours per week.

# Kentucky Statewide Occupational Employment Outlook

**Arts, Design, Entertainment, Sports & Media Occs.**

| Occupational  |  | Employment*       |                   | Change              |                      | Job Openings             |             |       | Average Wage 2007 | Educ/ Training Req'd~ |
|---|--|-------------------|-------------------|---------------------|----------------------|--------------------------|-------------|-------|-------------------|-----------------------|
| Code  | Title  | 2006<br>Estimated | 2016<br>Projected | 2006-2016<br>Number | 2006-2016<br>Percent | Average Annual 2006-2016 |             |       |                   |                       |
|   |  |                   |                   |                     |                      | Growth                   | Separations | Total |                   |                       |
| 27-0000 Arts, Design, Entertainment, Sports & Media Occs. |  | 23,552            | 26,405            | 2,853               | 12.11                | 303                      | 441         | 744   | 17.35             | n/a                   |
| 27-1000   | Art and Design Workers                                 | 8,314             | 9,005             | 691                 | 8.31                 | 79                       | 119         | 198   | n/a               | n/a                   |
| 27-1011   | Art Directors  | 274               | 307               | 33                  | 12.04                | 3                        | 6           | 9     | 30.95             | 4                     |
| 27-1012   | Craft Artists  | *                 | *                 | *                   | *                    | *                        | *           | *     | n/a               | 9                     |
| 27-1013   | Fine Artists, Incl. Painters, Sculptors & Illustrators | 230               | 245               | 15                  | 6.52                 | 2                        | 5           | 7     | 14.54             | 9                     |
| 27-1014   | Multi-Media Artists and Animators                      | 119               | 130               | 11                  | 9.24                 | 1                        | 3           | 4     | 22.95             | 5                     |
| 27-1019   | Artists and Related Workers, All Other                 | 561               | 555               | -6                  | -1.07                | 0                        | 10          | 10    | 22.06             | 9                     |
| 27-1021   | Commercial and Industrial Designers                    | 349               | 361               | 12                  | 3.44                 | 1                        | 5           | 6     | 26.04             | 5                     |
| 27-1022   | Fashion Designers                                      | 112               | 124               | 12                  | 10.71                | 1                        | 2           | 3     | n/a               | 6                     |
| 27-1023   | Floral Designers                                       | 1,344             | 1,269             | -75                 | -5.58                | 0                        | 18          | 18    | 10.91             | 10                    |
| 27-1024   | Graphic Designers                                      | 2,737             | 3,156             | 419                 | 15.31                | 42                       | 37          | 79    | 18.30             | 5                     |
| 27-1025   | Interior Designers                                     | 648               | 655               | 7                   | 1.08                 | 1                        | 9           | 10    | 20.85             | 6                     |
| 27-1026   | Merchandise Displayers and Window Trimmers             | 1,792             | 2,070             | 278                 | 15.51                | 28                       | 24          | 52    | 11.01             | 10                    |
| 27-1027   | Set and Exhibit Designers                              | *                 | *                 | *                   | *                    | *                        | *           | *     | 19.75             | 5                     |
| 27-1029   | Designers, All Other                                   | *                 | *                 | *                   | *                    | *                        | *           | *     | 17.30             | 5                     |
| 27-2000   | Entertainers, Performers, Sports & Related             | 5,113             | 6,002             | 889                 | 17.39                | 91                       | 117         | 208   | n/a               | n/a                   |
| 27-2011   | Actors   | *                 | *                 | *                   | *                    | *                        | *           | *     | 17.48             | 9                     |
| 27-2012   | Producers and Directors                                | 693               | 751               | 58                  | 8.37                 | 6                        | 10          | 16    | 19.04             | 4                     |
| 27-2021   | Athletes and Sports Competitors                        | *                 | *                 | *                   | *                    | *                        | *           | *     | n/a               | 9                     |
| 27-2022   | Coaches and Scouts                                     | 2,345             | 2,791             | 446                 | 19.02                | 45                       | 45          | 90    | n/a               | 9                     |
| 27-2023   | Umpires, Referees, and Other Sports Officials          | 262               | 323               | 61                  | 23.28                | 6                        | 5           | 11    | n/a               | 9                     |
| 27-2031   | Dancers  | *                 | *                 | *                   | *                    | *                        | *           | *     | 9.92              | 9                     |
| 27-2032   | Choreographers   | 513               | 720               | 207                 | 40.35                | 21                       | 32          | 53    | 15.77             | 8                     |
| 27-2041   | Music Directors and Composers                          | *                 | *                 | *                   | *                    | *                        | *           | *     | 21.91             | 4                     |
| 27-2042   | Musicians and Singers                                  | 697               | 777               | 80                  | 11.48                | 8                        | 15          | 23    | 19.80             | 9                     |
| 27-2099   | Entertainers & Performers, Sports & Related, Other     | 347               | 382               | 35                  | 10.09                | 4                        | 4           | 8     | 18.09             | 9                     |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide Occupational Employment Outlook

Arts, Design, Entertainment, Sports, Media Occs. (cont'd)

| Occupational   |  | Employment*  |              | Change<br>2006-2016 |              | Job Openings<br>Average Annual 2006-2016 |             |            | Average<br>Wage<br>2007 | Educ/<br>Training<br>Req'd~ |
|----------------|--|--------------|--------------|---------------------|--------------|--|-------------|------------|-------------------------|-----------------------------|
| Code           | Title  | Estimated    | Projected    | Number              | Percent      | Growth                                   | Separations | Total      |                         |                             |
| <b>27-3000</b> | <b>Media and Communication Workers</b>           | <b>7,151</b> | <b>7,990</b> | <b>839</b>          | <b>11.73</b> | <b>90</b>                                | <b>140</b>  | <b>230</b> | <b>n/a</b>              | <b>n/a</b>                  |
| 27-3011        | Radio and Television Announcers                  | 809          | 771          | -38                 | -4.70        | 0  | 21          | 21         | 13.05                   | 9                           |
| 27-3012        | Public Address System and Other Announcers       | 315          | 296          | -19                 | -6.03        | 0  | 8           | 8          | 11.54                   | 9                           |
| 27-3021        | Broadcast News Analysts                          | 175          | 172          | -3                  | -1.71        | 0  | 4           | 4          | 27.33                   | 4                           |
| 27-3022        | Reporters and Correspondents                     | 756          | 832          | 76                  | 10.05        | 8  | 18          | 26         | 17.15                   | 4                           |
| 27-3031        | Public Relations Specialists                     | 2,245        | 2,567        | 322                 | 14.34        | 32                                       | 32          | 64         | 19.97                   | 5                           |
| 27-3041        | Editors  | 860          | 998          | 138                 | 16.05        | 14                                       | 21          | 35         | 20.34                   | 5                           |
| 27-3042        | Technical Writers                                | 505          | 577          | 72                  | 14.26        | 7  | 15          | 22         | 23.00                   | 5                           |
| 27-3043        | Writers and Authors                              | 744          | 909          | 165                 | 22.18        | 17                                       | 13          | 30         | 23.50                   | 5                           |
| 27-3091        | Interpreters and Translators                     | 236          | 268          | 32                  | 13.56        | 3  | 3           | 6          | 18.23                   | 9                           |
| 27-3099        | Media and Communication Workers, All Other       | 506          | 600          | 94                  | 18.58        | 9  | 6           | 15         | 25.37                   | 9                           |
| <b>27-4000</b> | <b>Media and Communication Equipment Workers</b> | <b>2,974</b> | <b>3,408</b> | <b>434</b>          | <b>14.59</b> | <b>43</b>                                | <b>65</b>   | <b>108</b> | <b>n/a</b>              | <b>n/a</b>                  |
| 27-4011        | Audio and Video Equipment Technicians            | 219          | 242          | 23                  | 10.50        | 2  | 5           | 7          | 16.90                   | 9                           |
| 27-4012        | Broadcast Technicians                            | 554          | 577          | 23                  | 4.15         | 2  | 14          | 16         | 15.62                   | 6                           |
| 27-4014        | Sound Engineering Technicians                    | *            | *            | *                   | *            | *  | *           | *          | n/a                     | 7                           |
| 27-4021        | Photographers                                    | 1,601        | 1,927        | 326                 | 20.36        | 33                                       | 33          | 66         | 14.59                   | 9                           |
| 27-4031        | Camera Operators, TV, Video & Motion Picture     | 263          | 298          | 35                  | 13.31        | 4  | 6           | 10         | *                       | 10                          |
| 27-4032        | Film and Video Editors                           | *            | *            | *                   | *            | *  | *           | *          | 20.87                   | 5                           |
| 27-4099        | Media and Communication Equip. Workers, Other    | 212          | 234          | 22                  | 10.38        | 2  | 5           | 7          | 21.12                   | 10                          |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide Occupational Employment Outlook

## Healthcare Practitioners & Technical Occs.

| Occupational  |   | Employment*    |                | Change<br>2006-2016 |              | Job Openings<br>Average Annual 2006-2016 |              |              | Average<br>Wage<br>2007 | Educ/<br>Training<br>Req'd~ |
|---|---|----------------|----------------|---------------------|--------------|--|--------------|--------------|-------------------------|-----------------------------|
| Code  | Title   | Estimated      | Projected      | Number              | Percent      | Growth                                   | Separations  | Total        |                         |                             |
| <b>29-0000 Healthcare Practitioners and Technical Occupations</b> |   | <b>110,887</b> | <b>136,273</b> | <b>25,386</b>       | <b>22.89</b> | <b>2,539</b>                             | <b>2,101</b> | <b>4,640</b> | <b>26.66</b>            | <b>n/a</b>                  |
| <b>29-1000</b>  | <b>Health Diagnosing and Treating Practitioners</b> | <b>65,855</b>  | <b>82,687</b>  | <b>16,832</b>       | <b>25.56</b> | <b>1,683</b>                             | <b>1,307</b> | <b>2,990</b> | <b>n/a</b>              | <b>n/a</b>                  |
| 29-1011   | Chiropractors                                       | 929            | 1,108          | 179                 | 19.27        | 18                                       | 18           | 36           | 45.04                   | 1                           |
| 29-1021   | Dentists, General                                   | 1,012          | 1,135          | 123                 | 12.15        | 12                                       | 17           | 29           | 60.42                   | 1                           |
| 29-1022   | Oral and Maxillofacial Surgeons                     | *              | *              | *                   | *            | *  | *            | *            | n/a                     | 1                           |
| 29-1023   | Orthodontists                                       | 126            | 144            | 18                  | 14.29        | 2  | 2            | 4            | 96.93                   | 1                           |
| 29-1029   | Dentists, All Other                                 | 164            | 181            | 17                  | 10.37        | 2  | 3            | 5            | 22.28                   | 1                           |
| 29-1031   | Dietitians and Nutritionists                        | 880            | 1,049          | 169                 | 19.20        | 17                                       | 23           | 40           | 22.61                   | 5                           |
| 29-1041   | Optometrists  | 368            | 418            | 50                  | 13.59        | 5  | 10           | 15           | 52.40                   | 1                           |
| 29-1051   | Pharmacists   | 4,058          | 4,870          | 812                 | 20.01        | 81                                       | 79           | 160          | 49.09                   | 1                           |
| 29-1061   | Anesthesiologists                                   | 870            | 944            | 74                  | 8.51         | 7  | 12           | 19           | n/a                     | 1                           |
| 29-1062   | Family and General Practitioners                    | 1,008          | 1,166          | 158                 | 15.67        | 16                                       | 14           | 30           | 75.67                   | 1                           |
| 29-1063   | Internists, General                                 | 760            | 844            | 84                  | 11.05        | 8  | 10           | 18           | 71.30                   | 1                           |
| 29-1064   | Obstetricians and Gynecologists                     | 547            | 591            | 44                  | 8.04         | 4  | 7            | 11           | 90.77                   | 1                           |
| 29-1065   | Pediatricians, General                              | 581            | 623            | 42                  | 7.23         | 4  | 8            | 12           | 81.71                   | 1                           |
| 29-1066   | Psychiatrists                                       | 280            | 348            | 68                  | 24.29        | 7  | 4            | 11           | 87.01                   | 1                           |
| 29-1067   | Surgeons  | 1,334          | 1,437          | 103                 | 7.72         | 10                                       | 18           | 28           | n/a                     | 1                           |
| 29-1069   | Physicians and Surgeons, All Other                  | 2,955          | 3,275          | 320                 | 10.83        | 32                                       | 40           | 72           | 69.61                   | 1                           |
| 29-1071   | Physician Assistants                                | 477            | 621            | 144                 | 30.19        | 14                                       | 7            | 21           | 34.53                   | 5                           |
| 29-1081   | Podiatrists   | *              | *              | *                   | *            | *  | *            | *            | 82.12                   | 1                           |
| 29-1111   | Registered Nurses                                   | 40,633         | 52,965         | 12,332              | 30.35        | 1,233                                    | 850          | 2,083        | 25.85                   | 6                           |
| 29-1121   | Audiologists  | 107            | 107            | 0                   | 0.00         | 0  | 3            | 3            | 25.86                   | 1                           |
| 29-1122   | Occupational Therapists                             | 1,191          | 1,605          | 414                 | 34.76        | 41                                       | 16           | 57           | 30.91                   | 3                           |
| 29-1123   | Physical Therapists                                 | 1,941          | 2,505          | 564                 | 29.06        | 56                                       | 19           | 75           | 32.73                   | 3                           |
| 29-1124   | Radiation Therapists                                | 154            | 191            | 37                  | 24.03        | 4  | 4            | 8            | 31.16                   | 6                           |
| 29-1125   | Recreational Therapists                             | 142            | 158            | 16                  | 11.27        | 2  | 3            | 5            | 16.83                   | 5                           |
| 29-1126   | Respiratory Therapists                              | 1,692          | 2,209          | 517                 | 30.56        | 52                                       | 56           | 108          | 20.66                   | 6                           |
| 29-1127   | Speech-Language Pathologists                        | 1,607          | 1,792          | 185                 | 11.51        | 19                                       | 40           | 59           | 27.42                   | 3                           |
| 29-1129   | Therapists, All Other                               | 899            | 1,088          | 189                 | 21.02        | 19                                       | 20           | 39           | 27.18                   | 5                           |
| 29-1131   | Veterinarians                                       | 902            | 1,055          | 153                 | 16.96        | 15                                       | 22           | 37           | 34.35                   | 1                           |
| 29-1199   | Health Diagnosing & Treating Practitioners, Other   | 110            | 121            | 11                  | 10.00        | 1  | 2            | 3            | 32.54                   | 5                           |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide Occupational Employment Outlook

## Healthcare Practitioners & Tech. Occs. (cont'd)

| Occupational |  | Employment*       |                   | Change              |                      | Job Openings             |             |       | Average Wage<br>2007 | Educ/<br>Training<br>Req'd~ |
|--------------|--|-------------------|-------------------|---------------------|----------------------|--------------------------|-------------|-------|----------------------|-----------------------------|
| Code         | Title  | 2006<br>Estimated | 2016<br>Projected | 2006-2016<br>Number | 2006-2016<br>Percent | Average Annual 2006-2016 |             |       |                      |                             |
|              |  |                   |                   |                     |                      | Growth                   | Separations | Total |                      |                             |
| 29-2000      | Health Technologists and Technicians             | 42,850            | 51,079            | 8,229               | 19.20                | 823                      | 748         | 1,571 | n/a                  | n/a                         |
| 29-2011      | Medical and Clinical Laboratory Technologists    | 2,614             | 3,143             | 529                 | 20.24                | 53                       | 70          | 123   | 23.07                | 5                           |
| 29-2012      | Medical and Clinical Laboratory Technicians      | 1,613             | 1,928             | 315                 | 19.53                | 32                       | 44          | 76    | 16.67                | 6                           |
| 29-2021      | Dental Hygienists                                | 1,716             | 2,269             | 553                 | 32.23                | 55                       | 15          | 70    | 25.73                | 6                           |
| 29-2031      | Cardiovascular Technologists and Technicians     | 1,008             | 1,286             | 278                 | 27.58                | 28                       | 19          | 47    | 18.35                | 6                           |
| 29-2032      | Diagnostic Medical Sonographers                  | 551               | 710               | 159                 | 28.86                | 16                       | 10          | 26    | 25.63                | 6                           |
| 29-2033      | Nuclear Medicine Technologists                   | 290               | 351               | 61                  | 21.03                | 6                        | 5           | 11    | 25.95                | 6                           |
| 29-2034      | Radiologic Technologists and Technicians         | 3,943             | 4,894             | 951                 | 24.12                | 95                       | 74          | 169   | 21.16                | 6                           |
| 29-2041      | Emergency Medical Technicians and Paramedics     | 4,450             | 5,182             | 732                 | 16.45                | 73                       | 51          | 124   | 12.19                | 7                           |
| 29-2051      | Dietetic Technicians                             | 305               | 388               | 83                  | 27.21                | 8                        | 4           | 12    | 12.28                | 10                          |
| 29-2052      | Pharmacy Technicians                             | 6,052             | 7,342             | 1,290               | 21.32                | 129                      | 79          | 208   | 11.38                | 10                          |
| 29-2053      | Psychiatric Technicians                          | 794               | 858               | 64                  | 8.06                 | 6                        | 10          | 16    | 11.18                | 10                          |
| 29-2054      | Respiratory Therapy Technicians                  | 591               | 632               | 41                  | 6.94                 | 4                        | 8           | 12    | 17.26                | 6                           |
| 29-2055      | Surgical Technologists                           | 1,647             | 2,140             | 493                 | 29.93                | 49                       | 22          | 71    | 16.83                | 7                           |
| 29-2056      | Veterinary Technologists and Technicians         | 1,014             | 1,331             | 317                 | 31.26                | 32                       | 13          | 45    | 10.88                | 6                           |
| 29-2061      | Licensed Practical & Licensed Voc. Nurses        | 11,336            | 12,780            | 1,444               | 12.74                | 144                      | 247         | 391   | 16.77                | 7                           |
| 29-2071      | Medical Records & Health Info. Technicians       | 2,760             | 3,380             | 620                 | 22.46                | 62                       | 40          | 102   | 14.41                | 6                           |
| 29-2081      | Opticians, Dispensing                            | 738               | 815               | 77                  | 10.43                | 8                        | 13          | 21    | 14.94                | 9                           |
| 29-2091      | Orthotists and Prosthetists                      | 146               | 161               | 15                  | 10.27                | 2                        | 2           | 4     | 24.19                | 5                           |
| 29-2099      | Health Technologists and Technicians, All Other  | 1,282             | 1,489             | 207                 | 16.15                | 21                       | 23          | 44    | 19.24                | 7                           |
| 29-9000      | Other Healthcare Practitioners & Technical Occs. | 2,182             | 2,507             | 325                 | 14.89                | 33                       | 45          | 78    | n/a                  | n/a                         |
| 29-9011      | Occupational Health and Safety Specialists       | 1,120             | 1,206             | 86                  | 7.68                 | 9                        | 24          | 33    | 26.40                | 5                           |
| 29-9012      | Occupational Health and Safety Technicians       | 167               | 196               | 29                  | 17.37                | 3                        | 4           | 7     | 22.41                | 7                           |
| 29-9091      | Athletic Trainers                                | 336               | 440               | 104                 | 30.95                | 10                       | 7           | 17    | n/a                  | 5                           |
| 29-9099      | Healthcare Practitioners & Tech. Workers, Other  | 559               | 665               | 106                 | 18.96                | 11                       | 10          | 21    | 23.35                | 7                           |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch



# Kentucky Statewide Occupational Employment Outlook

## Healthcare Support Occupations

| Occupational                                  |   | Employment*   |               | Change<br>2006-2016 |              | Job Openings<br>Average Annual 2006-2016 |             |              | Average<br>Wage<br>2007 | Educ/<br>Training<br>Req'd~ |
|---|---|---------------|---------------|---------------------|--------------|--|-------------|--------------|-------------------------|-----------------------------|
| Code  | Title   | Estimated     | Projected     | Number              | Percent      | Growth                                   | Separations | Total        |                         |                             |
| <b>31-0000 Healthcare Support Occupations</b> |   | <b>50,738</b> | <b>63,385</b> | <b>12,647</b>       | <b>24.93</b> | <b>1,265</b>                             | <b>808</b>  | <b>2,073</b> | <b>11.39</b>            | <b>n/a</b>                  |
| <b>31-1000</b>                                | <b>Nursing, Psychiatric, and Home Health Aides</b>              | <b>29,895</b> | <b>37,003</b> | <b>7,108</b>        | <b>23.78</b> | <b>711</b>                               | <b>392</b>  | <b>1,103</b> | <b>n/a</b>              | <b>n/a</b>                  |
| 31-1011                                       | Home Health Aides   | 3,808         | 4,921         | 1,113               | 29.23        | 111                                      | 50          | 161          | 10.29                   | 11                          |
| 31-1012                                       | Nursing Aides, Orderlies, and Attendants                        | 25,641        | 31,529        | 5,888               | 22.96        | 589                                      | 336         | 925          | 10.35                   | 7                           |
| 31-1013                                       | Psychiatric Aides   | 446           | 553           | 107                 | 23.99        | 11                                       | 6           | 17           | 9.81                    | 11                          |
| <b>31-2000</b>                                | <b>Occupational &amp; Physical Therapist Assis. &amp; Aides</b> | <b>2,063</b>  | <b>2,733</b>  | <b>670</b>          | <b>32.48</b> | <b>67</b>                                | <b>33</b>   | <b>100</b>   | <b>n/a</b>              | <b>n/a</b>                  |
| 31-2011                                       | Occupational Therapist Assistants                               | 210           | 280           | 70                  | 33.33        | 7  | 3           | 10           | 22.17                   | 6                           |
| 31-2012                                       | Occupational Therapist Aides                                    | 152           | 200           | 48                  | 31.58        | 5  | 2           | 7            | 16.59                   | 11                          |
| 31-2021                                       | Physical Therapist Assistants                                   | 1,169         | 1,580         | 411                 | 35.16        | 41                                       | 20          | 61           | 20.06                   | 6                           |
| 31-2022                                       | Physical Therapist Aides  | 532           | 673           | 141                 | 26.50        | 14                                       | 9           | 23           | 10.74                   | 11                          |
| <b>31-9000</b>                                | <b>Other Healthcare Support Occupations</b>                     | <b>18,780</b> | <b>23,649</b> | <b>4,869</b>        | <b>25.93</b> | <b>487</b>                               | <b>383</b>  | <b>870</b>   | <b>n/a</b>              | <b>n/a</b>                  |
| 31-9011                                       | Massage Therapists  | 612           | 727           | 115                 | 18.79        | 12                                       | 12          | 24           | 13.10                   | 7                           |
| 31-9091                                       | Dental Assistants   | 3,747         | 4,951         | 1,204               | 32.13        | 120                                      | 105         | 225          | 13.89                   | 10                          |
| 31-9092                                       | Medical Assistants  | 7,216         | 9,455         | 2,239               | 31.03        | 224                                      | 134         | 358          | 11.97                   | 10                          |
| 31-9093                                       | Medical Equipment Preparers                                     | 921           | 1,151         | 230                 | 24.97        | 23                                       | 17          | 40           | 12.47                   | 11                          |
| 31-9094                                       | Medical Transcriptionists                                       | 1,823         | 2,199         | 376                 | 20.63        | 38                                       | 34          | 72           | 13.96                   | 7                           |
| 31-9095                                       | Pharmacy Aides  | 766           | 859           | 93                  | 12.14        | 9  | 14          | 23           | 8.96                    | 11                          |
| 31-9096                                       | Veterinary Assist. & Laboratory Animal Caretakers               | 628           | 734           | 106                 | 16.88        | 11                                       | 12          | 23           | 9.96                    | 11                          |
| 31-9099                                       | Healthcare Support Workers, All Other                           | 3,067         | 3,573         | 506                 | 16.50        | 51                                       | 57          | 108          | 12.51                   | 11                          |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch



# Kentucky Statewide Occupational Employment Outlook

## Protective Service Occupations

| Occupational                           |   | Employment*       |                   | Change              |         | Job Openings             |             |       | Average Wage 2007 | Educ/ Training Req'd~ |
|--|---|-------------------|-------------------|---------------------|---------|--------------------------|-------------|-------|-------------------|-----------------------|
| Code                                   | Title   | 2006<br>Estimated | 2016<br>Projected | 2006-2016<br>Number | Percent | Average Annual 2006-2016 |             |       |                   |                       |
|  |   |                   |                   |                     |         | Growth                   | Separations | Total |                   |                       |
| 33-0000 Protective Service Occupations |   | 36,294            | 40,429            | 4,135               | 11.39   | 416                      | 988         | 1,404 | n/a               | n/a                   |
| 33-1000                                | Managers, Protective Service Workers              | 3,953             | 4,333             | 380                 | 9.61    | 39                       | 128         | 167   | n/a               | n/a                   |
| 33-1011                                | Managers of Correctional Officers                 | 917               | 945               | 28                  | 3.05    | 3                        | 27          | 30    | 14.99             | 8                     |
| 33-1012                                | Managers of Police and Detectives                 | 1,280             | 1,450             | 170                 | 13.28   | 17                       | 42          | 59    | 27.89             | 8                     |
| 33-1021                                | Managers of Fire Fighting and Prevention Workers  | 904               | 1,091             | 187                 | 20.69   | 19                       | 37          | 56    | 23.38             | 8                     |
| 33-1099                                | Managers, Protective Service Workers, All Other   | 852               | 847               | -5                  | -0.59   | 0                        | 22          | 22    | 17.75             | 8                     |
| 33-2000                                | Fire Fighting and Prevention Workers              | 4,133             | 5,012             | 879                 | 21.27   | 90                       | 120         | 210   | n/a               | n/a                   |
| 33-2011                                | Fire Fighters                                     | 3,935             | 4,831             | 896                 | 22.77   | 90                       | 114         | 204   | 15.03             | 9                     |
| 33-2021                                | Fire Inspectors and Investigators                 | *                 | *                 | *                   | *       | *                        | *           | *     | 20.35             | 8                     |
| 33-2022                                | Forest Fire Inspectors and Prevention Specialists | *                 | *                 | *                   | *       | *                        | *           | *     | n/a               | 8                     |
| 33-3000                                | Law Enforcement Workers                           | 14,457            | 15,832            | 1,375               | 9.51    | 138                      | 341         | 479   | n/a               | n/a                   |
| 33-3011                                | Bailiffs  | *                 | *                 | *                   | *       | *                        | *           | *     | 10.81             | 10                    |
| 33-3012                                | Correctional Officers and Jailers                 | 5,849             | 6,170             | 321                 | 5.49    | 32                       | 121         | 153   | 13.78             | 10                    |
| 33-3021                                | Detectives and Criminal Investigators             | 653               | 732               | 79                  | 12.10   | 8                        | 18          | 26    | 28.32             | 8                     |
| 33-3031                                | Fish and Game Wardens                             | *                 | *                 | *                   | *       | *                        | *           | *     | n/a               | 6                     |
| 33-3041                                | Parking Enforcement Workers                       | *                 | *                 | *                   | *       | *                        | *           | *     | 11.31             | 11                    |
| 33-3051                                | Police and Sheriff's Patrol Officers              | 7,183             | 8,080             | 897                 | 12.49   | 90                       | 186         | 276   | 18.05             | 9                     |
| 33-3052                                | Transit and Railroad Police                       | *                 | *                 | *                   | *       | *                        | *           | *     | n/a               | 9                     |
| 33-9000                                | Other Protective Service Workers                  | 13,751            | 15,252            | 1,501               | 10.92   | 150                      | 400         | 550   | n/a               | n/a                   |
| 33-9011                                | Animal Control Workers                            | 190               | 213               | 23                  | 12.11   | 2                        | 13          | 15    | 11.47             | 10                    |
| 33-9021                                | Private Detectives and Investigators              | 269               | 331               | 62                  | 23.05   | 6                        | 6           | 12    | 14.70             | 8                     |
| 33-9031                                | Gaming Surveillance Ofcrs. & Gaming Investigators | *                 | *                 | *                   | *       | *                        | *           | *     | n/a               | 10                    |
| 33-9032                                | Security Guards                                   | 11,129            | 12,166            | 1,037               | 9.32    | 104                      | 242         | 346   | 10.95             | 11                    |
| 33-9091                                | Crossing Guards                                   | 306               | 369               | 63                  | 20.59   | 6                        | 10          | 16    | 9.84              | 11                    |
| 33-9092                                | Lifeguards, Ski Patrol & Rec. Protective Workers  | 664               | 800               | 136                 | 20.48   | 14                       | 46          | 60    | 7.52              | 11                    |
| 33-9099                                | Protective Service Workers, All Other             | 1,192             | 1,373             | 181                 | 15.18   | 18                       | 83          | 101   | 14.60             | 11                    |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide Occupational Employment Outlook

## Food Preparation & Serving Related Occs.

| Occupational   |  | Employment*       |                   | Change              |                      | Job Openings   |       |       | Average Wage<br>2007 | Educ/<br>Training<br>Req'd~ |
|--|--|-------------------|-------------------|---------------------|----------------------|--|-------|-------|----------------------|-----------------------------|
| Code   | Title  | 2006<br>Estimated | 2016<br>Projected | 2006-2016<br>Number | 2006-2016<br>Percent | Average Annual 2006-2016<br>Growth Separations Total |       |       |                      |                             |
| 35-0000 Food Preparation and Serving Related Occupations |  | 157,187           | 179,939           | 22,752              | 14.47                | 2,276  | 6,233 | 8,509 | 8.05                 | n/a                         |
| 35-1000  | Supervisors, Food Preparation & Serving Workers    | 15,655            | 18,256            | 2,601               | 16.61                | 260  | 378   | 638   | n/a                  | n/a                         |
| 35-1011  | Chefs and Head Cooks                               | 878               | 1,015             | 137                 | 15.60                | 14   | 26    | 40    | 16.34                | 8                           |
| 35-1012  | Managers of Food Preparation & Serving Workers     | 14,777            | 17,241            | 2,464               | 16.67                | 246  | 352   | 598   | 11.74                | 8                           |
| 35-2000  | Cooks and Food Preparation Workers                 | 38,093            | 42,320            | 4,227               | 11.10                | 423  | 1,214 | 1,637 | n/a                  | n/a                         |
| 35-2011  | Cooks, Fast Food                                   | 5,436             | 6,281             | 845                 | 15.54                | 85   | 168   | 253   | 7.16                 | 11                          |
| 35-2012  | Cooks, Institution and Cafeteria                   | 10,072            | 10,286            | 214                 | 2.12                 | 21   | 312   | 333   | 9.78                 | 10                          |
| 35-2013  | Cooks, Private Household                           | *                 | *                 | *                   | *                    | *  | *     | *     | n/a                  | 9                           |
| 35-2014  | Cooks, Restaurant                                  | 11,825            | 13,702            | 1,877               | 15.87                | 188  | 366   | 554   | 9.12                 | 9                           |
| 35-2015  | Cooks, Short Order                                 | 2,764             | 2,963             | 199                 | 7.20                 | 20   | 86    | 106   | 8.05                 | 11                          |
| 35-2019  | Cooks, All Other                                   | 211               | 212               | 1                   | 0.47                 | 0  | 7     | 7     | n/a                  | 10                          |
| 35-2021  | Food Preparation Workers                           | 7,761             | 8,856             | 1,095               | 14.11                | 110  | 275   | 385   | 9.05                 | 11                          |
| 35-3000  | Food and Beverage Serving Workers                  | 90,964            | 105,059           | 14,095              | 15.50                | 1,410  | 4,231 | 5,641 | n/a                  | n/a                         |
| 35-3011  | Bartenders   | 4,800             | 5,156             | 356                 | 7.42                 | 36   | 190   | 226   | 7.56                 | 11                          |
| 35-3021  | Combined Food Preparation & Service Workers        | 51,383            | 60,006            | 8,623               | 16.78                | 862  | 2,227 | 3,089 | 6.95                 | 11                          |
| 35-3022  | Counter Attendants, Cafeteria & Food Concession    | 3,839             | 4,445             | 606                 | 15.79                | 61   | 251   | 312   | 8.15                 | 11                          |
| 35-3031  | Waiters and Waitresses                             | 29,399            | 33,785            | 4,386               | 14.92                | 439  | 1,513 | 1,952 | 7.02                 | 11                          |
| 35-3041  | Food Servers, Nonrestaurant                        | 1,543             | 1,667             | 124                 | 8.04                 | 12   | 52    | 64    | 7.82                 | 11                          |
| 35-9000  | Other Food Preparation and Serving Related Workers | 12,475            | 14,304            | 1,829               | 14.66                | 183  | 411   | 594   | n/a                  | n/a                         |
| 35-9011  | Dining Room, Cafeteria Attend. & Bartender Help.   | 3,217             | 3,618             | 401                 | 12.47                | 40   | 108   | 148   | 7.42                 | 11                          |
| 35-9021  | Dishwashers  | 4,759             | 5,491             | 732                 | 15.38                | 73   | 161   | 234   | 8.02                 | 11                          |
| 35-9031  | Hosts & Hostesses, Restaurant & Lounge             | 4,293             | 4,970             | 677                 | 15.77                | 68   | 136   | 204   | 7.69                 | 11                          |
| 35-9099  | Food Prep. & Serving Related Workers, Other        | 206               | 225               | 19                  | 9.22                 | 2  | 6     | 8     | 9.65                 | 11                          |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide Occupational Employment Outlook

## Building, Grounds Cleaning & Maintenance Occs.

| Occupational   |  | Employment*   |               | Change<br>2006-2016 |              | Job Openings<br>Average Annual 2006-2016 |              |              | Average<br>Wage<br>2007 | Educ/<br>Training<br>Req'd~ |
|--|--|---------------|---------------|---------------------|--------------|--|--------------|--------------|-------------------------|-----------------------------|
| Code   | Title  | Estimated     | Projected     | Number              | Percent      | Growth                                   | Separations  | Total        |                         |                             |
| <b>37-0000 Building &amp; Grounds Cleaning &amp; Maintenance Occs.</b> |  | <b>60,124</b> | <b>70,368</b> | <b>10,244</b>       | <b>17.04</b> | <b>1,024</b>                             | <b>1,191</b> | <b>2,215</b> | <b>10.06</b>            | <b>n/a</b>                  |
| <b>37-1000 Supervisors, Bldg. &amp; Grounds Cleaning Workers</b>       |  | <b>6,487</b>  | <b>7,758</b>  | <b>1,271</b>        | <b>19.59</b> | <b>127</b>                               | <b>110</b>   | <b>237</b>   | <b>n/a</b>              | <b>n/a</b>                  |
| 37-1011  | Managers of Housekeeping & Janitorial Workers    | 3,450         | 4,065         | 615                 | 17.83        | 62                                       | 82           | 144          | 13.41                   | 8                           |
| 37-1012  | Managers of Landscaping, Lawn & Grounds. Work.   | 3,037         | 3,693         | 656                 | 21.60        | 66                                       | 28           | 94           | 15.45                   | 8                           |
| <b>37-2000 Building Cleaning and Pest Control Workers</b>              |  | <b>40,664</b> | <b>47,054</b> | <b>6,390</b>        | <b>15.71</b> | <b>639</b>                               | <b>799</b>   | <b>1,438</b> | <b>n/a</b>              | <b>n/a</b>                  |
| 37-2011  | Janitors & Cleaners, Excl. Maids & Housekeeping  | 25,003        | 29,192        | 4,189               | 16.75        | 419                                      | 475          | 894          | 9.76                    | 11                          |
| 37-2012  | Maids and Housekeeping Cleaners                  | 14,839        | 16,880        | 2,041               | 13.75        | 204                                      | 312          | 516          | 8.34                    | 11                          |
| 37-2019  | Building Cleaning Workers, All Other             | *             | *             | *                   | *            | *  | *            | *            | 11.44                   | 11                          |
| 37-2021  | Pest Control Workers                             | 744           | 885           | 141                 | 18.95        | 14                                       | 11           | 25           | 12.44                   | 10                          |
| <b>37-3000 Grounds Maintenance Workers</b>                             |  | <b>12,973</b> | <b>15,556</b> | <b>2,583</b>        | <b>19.91</b> | <b>258</b>                               | <b>282</b>   | <b>540</b>   | <b>n/a</b>              | <b>n/a</b>                  |
| 37-3011  | Landscaping and Groundskeeping Workers           | 11,393        | 13,669        | 2,276               | 19.98        | 228                                      | 248          | 476          | 10.42                   | 11                          |
| 37-3012  | Pesticide Handlers, Sprayers & Applicators, Veg. | 534           | 609           | 75                  | 14.04        | 8  | 12           | 20           | 15.09                   | 10                          |
| 37-3013  | Tree Trimmers and Pruners                        | 851           | 1,026         | 175                 | 20.56        | 18                                       | 19           | 37           | 11.58                   | 11                          |
| 37-3019  | Grounds Maintenance Workers, All Other           | 195           | 252           | 57                  | 29.23        | 6  | 4            | 10           | 12.26                   | 11                          |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide Occupational Employment Outlook

## Personal Care & Service Occupations

| Occupational                                  |   | Employment* |           | Change    |         | Job Openings             |             |       | Average | Educ/    |
|---|---|-------------|-----------|-----------|---------|--------------------------|-------------|-------|---------|----------|
| Code  | Title   | 2006        | 2016      | 2006-2016 |         | Average Annual 2006-2016 |             |       | Wage    | Training |
|   |   | Estimated   | Projected | Number    | Percent | Growth                   | Separations | Total | 2007    | Req'd~   |
| 39-0000 Personal Care and Service Occupations |   | 53,734      | 64,272    | 10,538    | 19.61   | 1,074                    | 1,302       | 2,376 | 10.84   | n/a      |
| 39-1000                                       | Supervisors, Personal Care and Service Workers      | 3,950       | 4,788     | 838       | 21.22   | 84                       | 99          | 183   | n/a     | n/a      |
| 39-1011                                       | Gaming Supervisors                                  | *           | *         | *         | *       | *                        | *           | *     | n/a     | 8        |
| 39-1021                                       | Managers of Personal Service Workers                | 3,922       | 4,751     | 829       | 21.14   | 83                       | 99          | 182   | 13.55   | 8        |
| 39-2000                                       | Animal Care and Service Workers                     | 5,133       | 6,437     | 1,304     | 25.40   | 130                      | 122         | 252   | n/a     | n/a      |
| 39-2011                                       | Animal Trainers                                     | 1,375       | 1,696     | 321       | 23.35   | 32                       | 28          | 60    | 14.15   | 10       |
| 39-2021                                       | Nonfarm Animal Caretakers                           | 3,758       | 4,741     | 983       | 26.16   | 98                       | 94          | 192   | 10.03   | 11       |
| 39-3000                                       | Entertainment Attendants and Related Workers        | 3,748       | 4,459     | 711       | 18.97   | 73                       | 144         | 217   | n/a     | n/a      |
| 39-3011                                       | Gaming Dealers                                      | *           | *         | *         | *       | *                        | *           | *     | n/a     | 7        |
| 39-3012                                       | Gaming and Sports Book Writers and Runners          | *           | *         | *         | *       | *                        | *           | *     | n/a     | 11       |
| 39-3021                                       | Motion Picture Projectionists                       | *           | *         | *         | *       | *                        | *           | *     | 9.92    | 11       |
| 39-3031                                       | Ushers, Lobby Attendants, and Ticket Takers         | 1,141       | 1,198     | 57        | 5.00    | 6                        | 65          | 71    | *       | 11       |
| 39-3091                                       | Amusement and Recreation Attendants                 | 1,484       | 1,856     | 372       | 25.07   | 37                       | 43          | 80    | 7.83    | 11       |
| 39-3092                                       | Costume Attendants                                  | *           | *         | *         | *       | *                        | *           | *     | n/a     | 11       |
| 39-3093                                       | Locker Room, Coatroom & Dressing Room Attend.       | *           | *         | *         | *       | *                        | *           | *     | 9.50    | 11       |
| 39-3099                                       | Entertainment Attend. & Related Workers, Other      | 798         | 1,047     | 249       | 31.20   | 25                       | 24          | 49    | n/a     | 10       |
| 39-4000                                       | Funeral Service Workers                             | 903         | 1,051     | 148       | 16.39   | 15                       | 19          | 34    | n/a     | n/a      |
| 39-4011                                       | Embalmers   | 180         | 202       | 22        | 12.22   | 2                        | 4           | 6     | 16.47   | 7        |
| 39-4021                                       | Funeral Attendants                                  | 723         | 849       | 126       | 17.43   | 13                       | 15          | 28    | 8.38    | 11       |
| 39-5000                                       | Personal Appearance Workers                         | 7,902       | 8,942     | 1,040     | 13.16   | 104                      | 158         | 262   | n/a     | n/a      |
| 39-5011                                       | Barbers   | 626         | 703       | 77        | 12.30   | 8                        | 18          | 26    | n/a     | 7        |
| 39-5012                                       | Hairdressers, Hairstylists, and Cosmetologists      | 6,653       | 7,517     | 864       | 12.99   | 86                       | 128         | 214   | 10.04   | 7        |
| 39-5092                                       | Manicurists and Pedicurists                         | 481         | 559       | 78        | 16.22   | 8                        | 9           | 17    | 11.12   | 7        |
| 39-5093                                       | Shampooers  | *           | *         | *         | *       | *                        | *           | *     | 7.63    | 11       |
| 39-5094                                       | Skin Care Specialists                               | *           | *         | *         | *       | *                        | *           | *     | 12.56   | 7        |
| 39-6000                                       | Transportation, Tourism, and Lodging Attendants     | 2,540       | 2,459     | -81       | -3.19   | 10                       | 43          | 53    | n/a     | n/a      |
| 39-6011                                       | Baggage Porters and Bellhops                        | 250         | 265       | 15        | 6.00    | 2                        | 7           | 9     | 10.10   | 11       |
| 39-6012                                       | Concierges  | *           | *         | *         | *       | *                        | *           | *     | *       | 10       |
| 39-6021                                       | Tour Guides and Escorts                             | 470         | 553       | 83        | 17.66   | 8                        | 12          | 20    | 10.50   | 10       |
| 39-6022                                       | Travel Guides                                       | *           | *         | *         | *       | *                        | *           | *     | n/a     | 10       |
| 39-6031                                       | Flight Attendants                                   | 1,743       | 1,566     | -177      | -10.16  | 0                        | 22          | 22    | n/a     | 9        |
| 39-6032                                       | Transp. Attend., Excl. Flight Attend. & Bag Porters | *           | *         | *         | *       | *                        | *           | *     | n/a     | 11       |

# Kentucky Statewide Occupational Employment Outlook

## Personal Care & Service Occs. (cont'd)

| Occupational   |  | Employment*   |               | Change<br>2006-2016 |              | Job Openings<br>Average Annual 2006-2016 |             |              | Average<br>Wage<br>2007 | Educ/<br>Training<br>Req'd~ |
|----------------|--|---------------|---------------|---------------------|--------------|--|-------------|--------------|-------------------------|-----------------------------|
| Code           | Title  | Estimated     | Projected     | Number              | Percent      | Growth                                   | Separations | Total        |                         |                             |
| <b>39-9000</b> | <b>Other Personal Care and Service Workers</b> | <b>29,558</b> | <b>36,136</b> | <b>6,578</b>        | <b>22.25</b> | <b>658</b>                               | <b>717</b>  | <b>1,375</b> | <b>n/a</b>              | <b>n/a</b>                  |
| 39-9011        | Child Care Workers                             | 17,462        | 20,738        | 3,276               | 18.76        | 328                                      | 476         | 804          | 7.91                    | 11                          |
| 39-9021        | Personal and Home Care Aides                   | 4,343         | 5,988         | 1,645               | 37.88        | 165                                      | 70          | 235          | 8.35                    | 11                          |
| 39-9031        | Fitness Trainers and Aerobics Instructors      | 1,739         | 2,272         | 533                 | 30.65        | 53                                       | 40          | 93           | 11.56                   | 7                           |
| 39-9032        | Recreation Workers                             | 2,486         | 2,951         | 465                 | 18.70        | 47                                       | 57          | 104          | 11.72                   | 11                          |
| 39-9041        | Residential Advisors                           | 2,818         | 3,403         | 585                 | 20.76        | 59                                       | 59          | 118          | 9.89                    | 10                          |
| 39-9099        | Personal Care and Service Workers, All Other   | 710           | 784           | 74                  | 10.42        | 7  | 15          | 22           | n/a                     | 11                          |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide Occupational Employment Outlook

## Sales & Related Occupations

| Occupational                          |   | Employment*       |                   | Change              |                      | Job Openings |             |       | Average Wage<br>2007 | Educ/<br>Training<br>Req'd~ |
|---------------------------------------|---|-------------------|-------------------|---------------------|----------------------|--------------|-------------|-------|----------------------|-----------------------------|
| Code                                  | Title   | 2006<br>Estimated | 2016<br>Projected | 2006-2016<br>Number | 2006-2016<br>Percent | Growth       | Separations | Total |                      |                             |
| 41-0000 Sales and Related Occupations |   | 207,033           | 219,855           | 12,822              | 6.19                 | 1,606        | 6,710       | 8,316 | 14.10                | n/a                         |
| 41-1000                               | Supervisors, Sales Workers                          | 37,609            | 39,256            | 1,647               | 4.38                 | 165          | 682         | 847   | n/a                  | n/a                         |
| 41-1011                               | Managers of Retail Sales Workers                    | 30,376            | 31,590            | 1,214               | 4.00                 | 121          | 546         | 667   | 15.62                | 8                           |
| 41-1012                               | Managers of Non-Retail Sales Workers                | 7,233             | 7,666             | 433                 | 5.99                 | 43           | 137         | 180   | 27.10                | 8                           |
| 41-2000                               | Retail Sales Workers                                | 117,654           | 122,723           | 5,069               | 4.31                 | 790          | 4,861       | 5,651 | n/a                  | n/a                         |
| 41-2011                               | Cashiers  | 48,698            | 46,365            | -2,333              | -4.79                | 0            | 2,369       | 2,369 | 7.80                 | 11                          |
| 41-2012                               | Gaming Change Persons and Booth Cashiers            | *                 | *                 | *                   | *                    | *            | *           | *     | n/a                  | 11                          |
| 41-2021                               | Counter and Rental Clerks                           | 6,826             | 7,811             | 985                 | 14.43                | 99           | 261         | 360   | 8.85                 | 11                          |
| 41-2022                               | Parts Salespersons                                  | 3,599             | 3,100             | -499                | -13.87               | 0            | 103         | 103   | 12.32                | 10                          |
| 41-2031                               | Retail Salespersons                                 | 58,531            | 65,447            | 6,916               | 11.82                | 692          | 2,128       | 2,820 | 9.98                 | 11                          |
| 41-3000                               | Sales Representatives, Services                     | 17,739            | 19,938            | 2,199               | 12.40                | 241          | 345         | 586   | n/a                  | n/a                         |
| 41-3011                               | Advertising Sales Agents                            | 1,581             | 1,803             | 222                 | 14.04                | 22           | 31          | 53    | 22.35                | 10                          |
| 41-3021                               | Insurance Sales Agents                              | 5,613             | 6,094             | 481                 | 8.57                 | 48           | 134         | 182   | 28.38                | 5                           |
| 41-3031                               | Securities, Commodities & Financial Serv. Sales     | 2,957             | 3,761             | 804                 | 27.19                | 80           | 34          | 114   | 48.61                | 5                           |
| 41-3041                               | Travel Agents                                       | 656               | 448               | -208                | -31.71               | 0            | 15          | 15    | 16.51                | 7                           |
| 41-3099                               | Sales Representatives, Services, All Other          | 6,932             | 7,832             | 900                 | 12.98                | 90           | 132         | 222   | 21.67                | 10                          |
| 41-4000                               | Sales Reps., Wholesale and Manufacturing            | 22,841            | 25,270            | 2,429               | 10.63                | 243          | 600         | 843   | n/a                  | n/a                         |
| 41-4011                               | Sales Reps., Wholesale & Manuf., Tech. & Sci.       | 4,739             | 5,175             | 436                 | 9.20                 | 44           | 124         | 168   | 36.56                | 10                          |
| 41-4012                               | Sales Reps., Wholesale & Manuf., Excl. Tech. & Sci. | 18,102            | 20,095            | 1,993               | 11.01                | 199          | 475         | 674   | 25.67                | 10                          |
| 41-9000                               | Other Sales and Related Workers                     | 11,190            | 12,668            | 1,478               | 13.21                | 168          | 222         | 390   | n/a                  | n/a                         |
| 41-9011                               | Demonstrators and Product Promoters                 | 786               | 906               | 120                 | 15.27                | 12           | 18          | 30    | 12.11                | 10                          |
| 41-9012                               | Models  | *                 | *                 | *                   | *                    | *            | *           | *     | 11.23                | 10                          |
| 41-9021                               | Real Estate Brokers                                 | 169               | 215               | 46                  | 27.22                | 5            | 3           | 8     | n/a                  | 8                           |
| 41-9022                               | Real Estate Sales Agents                            | 5,726             | 7,083             | 1,357               | 23.70                | 136          | 114         | 250   | 14.96                | 7                           |
| 41-9031                               | Sales Engineers                                     | 269               | 259               | -10                 | -3.72                | 0            | 8           | 8     | 33.61                | 5                           |
| 41-9041                               | Telemarketers                                       | 2,056             | 1,865             | -191                | -9.29                | 0            | 34          | 34    | 10.24                | 11                          |
| 41-9091                               | Door-To-Door Sales, News, Street Vend. & Related    | 960               | 980               | 20                  | 2.08                 | 2            | 23          | 25    | 16.87                | 11                          |
| 41-9099                               | Sales and Related Workers, All Other                | 1,178             | 1,312             | 134                 | 11.38                | 13           | 22          | 35    | 16.71                | 10                          |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide Occupational Employment Outlook

## Office & Administrative Support Occs.

| Occupational |  | Employment*       |                   | Change                      |        | Job Openings   |       |       | Average Wage 2007 | Educ/ Training Req'd~ |
|--------------|--|-------------------|-------------------|-----------------------------|--------|--|-------|-------|-------------------|-----------------------|
| Code         | Title  | 2006<br>Estimated | 2016<br>Projected | 2006-2016<br>Number Percent |        | Average Annual 2006-2016<br>Growth Separations Total |       |       |                   |                       |
| 43-0000      | Office and Administrative Support Occupations      | 305,667           | 312,397           | 6,730                       | 2.20   | 1,684  | 7,113 | 8,797 | 13.54             | n/a                   |
| 43-1000      | Supervisors, Office & Admin. Support Workers       | 19,909            | 20,833            | 924                         | 4.64   | 92   | 427   | 519   | n/a               | n/a                   |
| 43-1011      | Managers of Office & Admin. Support Workers        | 19,909            | 20,833            | 924                         | 4.64   | 92   | 427   | 519   | 19.45             | 8                     |
| 43-2000      | Communications Equipment Operators                 | 3,166             | 2,463             | -703                        | -22.21 | 0  | 81    | 81    | n/a               | n/a                   |
| 43-2011      | Switchboard Operators, Incl. Answering Service     | 1,711             | 1,505             | -206                        | -12.04 | 0  | 44    | 44    | 10.79             | 11                    |
| 43-2021      | Telephone Operators                                | 1,406             | 918               | -488                        | -34.71 | 0  | 36    | 36    | n/a               | 11                    |
| 43-2099      | Communications Equipment Operators, All Other      | *                 | *                 | *                           | *      | *  | *     | *     | 15.98             | 11                    |
| 43-3000      | Financial Clerks                                   | 53,981            | 56,431            | 2,450                       | 4.54   | 275  | 1,254 | 1,529 | n/a               | n/a                   |
| 43-3011      | Bill and Account Collectors                        | 5,466             | 6,650             | 1,184                       | 21.66  | 118  | 103   | 221   | 14.11             | 11                    |
| 43-3021      | Billing and Posting Clerks and Machine Operators   | 10,678            | 10,459            | -219                        | -2.05  | 0  | 181   | 181   | 13.32             | 10                    |
| 43-3031      | Bookkeeping, Accounting, and Auditing Clerks       | 26,716            | 27,235            | 519                         | 1.94   | 52   | 500   | 552   | 13.89             | 10                    |
| 43-3051      | Payroll and Timekeeping Clerks                     | 2,549             | 2,815             | 266                         | 10.44  | 27   | 67    | 94    | 14.65             | 10                    |
| 43-3061      | Procurement Clerks                                 | 861               | 776               | -85                         | -9.87  | 0  | 22    | 22    | 16.00             | 11                    |
| 43-3071      | Tellers  | 7,711             | 8,496             | 785                         | 10.18  | 79   | 380   | 459   | 10.32             | 11                    |
| 43-4000      | Information and Record Clerks                      | 73,411            | 79,727            | 6,316                       | 8.60   | 919  | 1,581 | 2,500 | n/a               | n/a                   |
| 43-4011      | Brokerage Clerks                                   | 520               | 660               | 140                         | 26.92  | 14   | 7     | 21    | 15.72             | 10                    |
| 43-4021      | Correspondence Clerks                              | 149               | 146               | -3                          | -2.01  | 0  | 4     | 4     | 15.58             | 11                    |
| 43-4031      | Court, Municipal, and License Clerks               | 3,144             | 3,566             | 422                         | 13.42  | 42   | 70    | 112   | n/a               | 11                    |
| 43-4041      | Credit Authorizers, Checkers, and Clerks           | 249               | 137               | -112                        | -44.98 | 0  | 5     | 5     | 15.13             | 11                    |
| 43-4051      | Customer Service Representatives                   | 25,020            | 29,363            | 4,343                       | 17.36  | 434  | 372   | 806   | 13.74             | 10                    |
| 43-4061      | Eligibility Interviewers, Government Programs      | 1,467             | 1,374             | -93                         | -6.34  | 0  | 39    | 39    | 20.01             | 10                    |
| 43-4071      | File Clerks  | 2,107             | 1,273             | -834                        | -39.58 | 0  | 63    | 63    | 9.99              | 11                    |
| 43-4081      | Hotel, Motel, and Resort Desk Clerks               | 3,235             | 3,511             | 276                         | 8.53   | 28   | 145   | 173   | 8.21              | 11                    |
| 43-4111      | Interviewers, Excl. Eligibility and Loan           | 5,089             | 6,466             | 1,377                       | 27.06  | 138  | 131   | 269   | 11.38             | 11                    |
| 43-4121      | Library Assistants, Clerical                       | 1,509             | 1,648             | 139                         | 9.21   | 14   | 61    | 75    | 9.65              | 11                    |
| 43-4131      | Loan Interviewers and Clerks                       | 2,556             | 2,335             | -221                        | -8.65  | 0  | 35    | 35    | 13.57             | 11                    |
| 43-4141      | New Accounts Clerks                                | 792               | 836               | 44                          | 5.56   | 4  | 20    | 24    | 13.29             | 8                     |
| 43-4151      | Order Clerks                                       | 3,352             | 2,543             | -809                        | -24.14 | 0  | 75    | 75    | 12.38             | 11                    |
| 43-4161      | H.R. Assistants, Excl. Payroll & Timekeeping       | 1,641             | 1,844             | 203                         | 12.37  | 20   | 35    | 55    | 15.91             | 11                    |
| 43-4171      | Receptionists and Information Clerks               | 16,237            | 18,478            | 2,241                       | 13.80  | 224  | 399   | 623   | 10.56             | 11                    |
| 43-4181      | Reservation, Transp. Ticket Agents & Travel Clerks | 1,899             | 1,420             | -479                        | -25.22 | 0  | 50    | 50    | 13.72             | 11                    |
| 43-4199      | Information and Record Clerks, All Other           | 4,445             | 4,127             | -318                        | -7.15  | 0  | 70    | 70    | 14.63             | 11                    |



# Kentucky Statewide Occupational Employment Outlook

## Office & Administrative Support Occs. (cont'd)

| Occupational   |   | Employment*   |               | Change<br>2006-2016 |              | Job Openings<br>Average Annual 2006-2016 |              |              | Average<br>Wage<br>2007 | Educ/<br>Training<br>Req'd~ |
|----------------|---|---------------|---------------|---------------------|--------------|--|--------------|--------------|-------------------------|-----------------------------|
| Code           | Title   | Estimated     | Projected     | Number              | Percent      | Growth                                   | Separations  | Total        |                         |                             |
| <b>43-5000</b> | <b>Material Recording, Dispatching &amp; Distributing Work.</b> | <b>60,539</b> | <b>58,312</b> | <b>-2,227</b>       | <b>-3.68</b> | <b>101</b>                               | <b>1,827</b> | <b>1,928</b> | <b>n/a</b>              | <b>n/a</b>                  |
| 43-5011        | Cargo and Freight Agents  | 904           | 846           | -58                 | -6.42        | 0  | 20           | 20           | 18.47                   | 10                          |
| 43-5021        | Couriers and Messengers   | 1,647         | 1,549         | -98                 | -5.95        | 0  | 38           | 38           | 9.81                    | 11                          |
| 43-5031        | Police, Fire, and Ambulance Dispatchers                         | 1,841         | 2,071         | 230                 | 12.49        | 23                                       | 40           | 63           | 12.83                   | 10                          |
| 43-5032        | Dispatchers, Except Police, Fire, and Ambulance                 | 2,920         | 2,858         | -62                 | -2.12        | 0  | 63           | 63           | 15.68                   | 10                          |
| 43-5041        | Meter Readers, Utilities  | 1,021         | 564           | -457                | -44.76       | 0  | 32           | 32           | 12.89                   | 11                          |
| 43-5051        | Postal Service Clerks   | 1,021         | 999           | -22                 | -2.15        | 0  | 27           | 27           | 21.21                   | 11                          |
| 43-5052        | Postal Service Mail Carriers                                    | 4,698         | 4,600         | -98                 | -2.09        | 0  | 147          | 147          | 21.52                   | 11                          |
| 43-5053        | Postal Service Mail Sorters, Processors                         | 2,000         | 1,958         | -42                 | -2.10        | 0  | 53           | 53           | 18.72                   | 11                          |
| 43-5061        | Production, Planning, and Expediting Clerks                     | 3,239         | 3,495         | 256                 | 7.90         | 26                                       | 78           | 104          | 18.24                   | 11                          |
| 43-5071        | Shipping, Receiving, and Traffic Clerks                         | 11,229        | 11,748        | 519                 | 4.62         | 52                                       | 231          | 283          | 13.40                   | 11                          |
| 43-5081        | Stock Clerks and Order Fillers                                  | 28,987        | 26,637        | -2,350              | -8.11        | 0  | 1,073        | 1,073        | 11.95                   | 11                          |
| 43-5111        | Weigher, Measurer, Checker & Sampler, Records                   | 1,032         | 987           | -45                 | -4.36        | 0  | 26           | 26           | 12.63                   | 11                          |
| <b>43-6000</b> | <b>Secretaries and Administrative Assistants</b>                | <b>57,804</b> | <b>58,525</b> | <b>721</b>          | <b>1.25</b>  | <b>224</b>                               | <b>1,107</b> | <b>1,331</b> | <b>n/a</b>              | <b>n/a</b>                  |
| 43-6011        | Executive Secretaries & Admin. Assistants                       | 25,085        | 26,716        | 1,631               | 6.50         | 163                                      | 480          | 643          | 16.12                   | 10                          |
| 43-6012        | Legal Secretaries   | 1,868         | 2,084         | 216                 | 11.56        | 22                                       | 36           | 58           | 16.82                   | 7                           |
| 43-6013        | Medical Secretaries   | 4,909         | 5,302         | 393                 | 8.01         | 39                                       | 94           | 133          | 12.08                   | 7                           |
| 43-6014        | Secretaries, Excl. Legal, Medical, and Executive                | 25,942        | 24,423        | -1,519              | -5.86        | 0  | 497          | 497          | 11.63                   | 10                          |
| <b>43-9000</b> | <b>Other Office and Administrative Support Workers</b>          | <b>36,857</b> | <b>36,106</b> | <b>-751</b>         | <b>-2.04</b> | <b>73</b>                                | <b>836</b>   | <b>909</b>   | <b>n/a</b>              | <b>n/a</b>                  |
| 43-9011        | Computer Operators  | 917           | 621           | -296                | -32.28       | 0  | 20           | 20           | 16.71                   | 10                          |
| 43-9021        | Data Entry Keyers   | 4,720         | 4,596         | -124                | -2.63        | 0  | 111          | 111          | 11.35                   | 10                          |
| 43-9022        | Word Processors and Typists                                     | 1,011         | 876           | -135                | -13.35       | 0  | 22           | 22           | 13.10                   | 10                          |
| 43-9031        | Desktop Publishers  | 194           | 235           | 41                  | 21.13        | 4  | 4            | 8            | 17.49                   | 7                           |
| 43-9041        | Insurance Claims and Policy Processing Clerks                   | 1,206         | 1,243         | 37                  | 3.07         | 4  | 19           | 23           | 15.86                   | 10                          |
| 43-9051        | Mail Clerks & Mail Machine Operators, Excl. Postal              | 1,925         | 1,201         | -724                | -37.61       | 0  | 58           | 58           | 11.93                   | 11                          |
| 43-9061        | Office Clerks, General  | 22,973        | 23,473        | 500                 | 2.18         | 50                                       | 509          | 559          | 11.26                   | 11                          |
| 43-9071        | Office Machine Operators, Excl. Computer                        | 877           | 673           | -204                | -23.26       | 0  | 22           | 22           | 11.59                   | 11                          |
| 43-9081        | Proofreaders and Copy Markers                                   | 243           | 244           | 1                   | 0.41         | 0  | 5            | 5            | 13.36                   | 11                          |
| 43-9111        | Statistical Assistants  | *             | *             | *                   | *            | *  | *            | *            | 19.47                   | 10                          |
| 43-9199        | Office & Admin. Support Workers, All Other                      | 2,766         | 2,919         | 153                 | 5.53         | 15                                       | 65           | 80           | 12.86                   | 11                          |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch



# Kentucky Statewide Occupational Employment Outlook

## Farming, Fishing & Forestry Occupations

| Occupational   |   | Employment*   |               | Change<br>2006-2016 |              | Job Openings<br>Average Annual 2006-2016 |             |            | Average<br>Wage<br>2007 | Educ/<br>Training<br>Req'd~ |
|----------------|---|---------------|---------------|---------------------|--------------|--|-------------|------------|-------------------------|-----------------------------|
| Code           | Title   | Estimated     | Projected     | Number              | Percent      | Growth                                   | Separations | Total      |                         |                             |
| <b>45-0000</b> | <b>Farming, Fishing, and Forestry Occupations</b>           | <b>14,636</b> | <b>13,861</b> | <b>-775</b>         | <b>-5.30</b> | <b>49</b>                                | <b>376</b>  | <b>426</b> | <b>11.21</b>            | <b>n/a</b>                  |
| <b>45-1000</b> | <b>Supervisors, Farming, Fishing &amp; Forestry Workers</b> | <b>1,420</b>  | <b>1,491</b>  | <b>71</b>           | <b>5.00</b>  | <b>7</b>                                 | <b>33</b>   | <b>40</b>  | <b>n/a</b>              | <b>n/a</b>                  |
| 45-1011        | Managers of Farming, Fishing & Forestry Workers             | 1,408         | 1,480         | 72                  | 5.11         | 7  | 32          | 39         | 17.71                   | 8                           |
| 45-1012        | Farm Labor Contractors                                      | *             | *             | *                   | *            | *  | *           | *          | n/a                     | 8                           |
| <b>45-2000</b> | <b>Agricultural Workers</b>                                 | <b>11,757</b> | <b>10,958</b> | <b>-799</b>         | <b>-6.80</b> | <b>38</b>                                | <b>316</b>  | <b>354</b> | <b>n/a</b>              | <b>n/a</b>                  |
| 45-2011        | Agricultural Inspectors                                     | 299           | 295           | -4                  | -1.34        | 0  | 7           | 7          | 17.87                   | 8                           |
| 45-2021        | Animal Breeders   | 1,244         | 1,604         | 360                 | 28.94        | 36                                       | 21          | 57         | 11.36                   | 11                          |
| 45-2041        | Graders and Sorters, Agricultural Products                  | 458           | 396           | -62                 | -13.54       | 0  | 12          | 12         | 10.37                   | 8                           |
| 45-2091        | Agricultural Equipment Operators                            | 1,534         | 1,457         | -77                 | -5.02        | 0  | 44          | 44         | 10.84                   | 10                          |
| 45-2092        | Farmworkers & Laborers, Crop, Nursery                       | 4,782         | 4,199         | -583                | -12.20       | 0  | 136         | 136        | 9.11                    | 11                          |
| 45-2093        | Farmworkers, Farm and Ranch Animals                         | 3,272         | 3,296         | 24                  | 0.73         | 2  | 93          | 95         | 9.58                    | 11                          |
| 45-2099        | Agricultural Workers, All Other                             | 168           | 161           | -7                  | -4.17        | 0  | 4           | 4          | n/a                     | 11                          |
| <b>45-4000</b> | <b>Forest, Conservation, and Logging Workers</b>            | <b>1,457</b>  | <b>1,410</b>  | <b>-47</b>          | <b>-3.23</b> | <b>4</b>                                 | <b>28</b>   | <b>32</b>  | <b>n/a</b>              | <b>n/a</b>                  |
| 45-4011        | Forest and Conservation Workers                             | *             | *             | *                   | *            | *  | *           | *          | n/a                     | 10                          |
| 45-4021        | Fallers   | 288           | 262           | -26                 | -9.03        | 0  | 5           | 5          | 11.59                   | 10                          |
| 45-4022        | Logging Equipment Operators                                 | 617           | 565           | -52                 | -8.43        | 0  | 11          | 11         | 11.50                   | 10                          |
| 45-4023        | Log Graders and Scalers                                     | 425           | 460           | 35                  | 8.24         | 4  | 8           | 12         | 13.28                   | 10                          |
| 45-4029        | Logging Workers, All Other                                  | *             | *             | *                   | *            | *  | *           | *          | 10.90                   | 10                          |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide Occupational Employment Outlook

## Construction & Extraction Occupations

| Occupational                                    |   | Employment*       |                   | Change              |                      | Job Openings   |       |       | Average Wage<br>2007 | Educ/<br>Training<br>Req'd~ |
|---|---|-------------------|-------------------|---------------------|----------------------|--|-------|-------|----------------------|-----------------------------|
| Code  | Title   | 2006<br>Estimated | 2016<br>Projected | 2006-2016<br>Number | 2006-2016<br>Percent | Average Annual 2006-2016<br>Growth Separations Total |       |       |                      |                             |
| 47-0000 Construction and Extraction Occupations |   | 101,883           | 114,721           | 12,838              | 12.60                | 1,291  | 2,052 | 3,343 | 17.28                | n/a                         |
| 47-1000   | Supervisors, Construction and Extraction Workers  | 11,037            | 12,776            | 1,739               | 15.76                | 174  | 188   | 362   | n/a                  | n/a                         |
| 47-1011   | Managers of Constr. Trades & Extraction Workers   | 11,037            | 12,776            | 1,739               | 15.76                | 174  | 188   | 362   | 24.19                | 8                           |
| 47-2000   | Construction Trades Workers                       | 74,182            | 83,190            | 9,008               | 12.14                | 901  | 1,413 | 2,314 | n/a                  | n/a                         |
| 47-2011   | Boilermakers                                      | 418               | 432               | 14                  | 3.35                 | 1  | 15    | 16    | 25.61                | 9                           |
| 47-2021   | Brickmasons and Blockmasons                       | 1,862             | 2,089             | 227                 | 12.19                | 23   | 28    | 51    | 19.29                | 9                           |
| 47-2022   | Stonemasons                                       | 428               | 462               | 34                  | 7.94                 | 3  | 6     | 9     | 12.85                | 9                           |
| 47-2031   | Carpenters  | 13,540            | 16,294            | 2,754               | 20.34                | 275  | 220   | 495   | 16.56                | 9                           |
| 47-2041   | Carpet Installers                                 | 517               | 568               | 51                  | 9.86                 | 5  | 8     | 13    | 14.85                | 10                          |
| 47-2042   | Floor Layers, Except Carpet, Wood, and Hard Tiles | 123               | 134               | 11                  | 8.94                 | 1  | 2     | 3     | 15.66                | 10                          |
| 47-2043   | Floor Sanders and Finishers                       | 280               | 323               | 43                  | 15.36                | 4  | 4     | 8     | 16.12                | 10                          |
| 47-2044   | Tile and Marble Setters                           | 501               | 612               | 111                 | 22.16                | 11   | 8     | 19    | 18.26                | 9                           |
| 47-2051   | Cement Masons and Concrete Finishers              | 2,408             | 2,762             | 354                 | 14.70                | 35   | 49    | 84    | 15.41                | 10                          |
| 47-2053   | Terrazzo Workers and Finishers                    | *                 | *                 | *                   | *                    | *  | *     | *     | 14.18                | 9                           |
| 47-2061   | Construction Laborers                             | 12,410            | 12,976            | 566                 | 4.56                 | 57   | 165   | 222   | 13.25                | 10                          |
| 47-2071   | Paving, Surfacing & Tamping Equip. Operators      | 969               | 1,078             | 109                 | 11.25                | 11   | 14    | 25    | 16.96                | 10                          |
| 47-2072   | Pile-Driver Operators                             | *                 | *                 | *                   | *                    | *  | *     | *     | 18.47                | 10                          |
| 47-2073   | Operating Engineers & Other Constr. Equip. Ops.   | 10,037            | 11,639            | 1,602               | 15.96                | 160  | 258   | 418   | 17.43                | 10                          |
| 47-2081   | Drywall and Ceiling Tile Installers               | 2,002             | 2,149             | 147                 | 7.34                 | 15   | 43    | 58    | 16.08                | 10                          |
| 47-2082   | Tapers  | 189               | 201               | 12                  | 6.35                 | 1  | 4     | 5     | 18.45                | 10                          |
| 47-2111   | Electricians                                      | 10,013            | 10,724            | 711                 | 7.10                 | 71   | 198   | 269   | 20.37                | 9                           |
| 47-2121   | Glaziers  | 741               | 848               | 107                 | 14.44                | 11   | 16    | 27    | 15.57                | 9                           |
| 47-2131   | Insulation Workers, Floor, Ceiling, and Wall      | 505               | 539               | 34                  | 6.73                 | 3  | 15    | 18    | 16.42                | 10                          |
| 47-2132   | Insulation Workers, Mechanical                    | 151               | 148               | -3                  | -1.99                | 0  | 5     | 5     | 19.96                | 10                          |
| 47-2141   | Painters, Construction and Maintenance            | 4,171             | 4,852             | 681                 | 16.33                | 68   | 64    | 132   | 14.36                | 10                          |
| 47-2142   | Paperhangers                                      | 175               | 184               | 9                   | 5.14                 | 1  | 2     | 3     | 16.61                | 10                          |
| 47-2151   | Pipelayers  | 747               | 835               | 88                  | 11.78                | 9  | 17    | 26    | 17.62                | 10                          |
| 47-2152   | Plumbers, Pipefitters, and Steamfitters           | 6,504             | 7,172             | 668                 | 10.27                | 67   | 150   | 217   | 21.80                | 9                           |
| 47-2161   | Plasterers and Stucco Masons                      | 143               | 154               | 11                  | 7.69                 | 1  | 3     | 4     | 18.84                | 9                           |
| 47-2171   | Reinforcing Iron and Rebar Workers                | 505               | 568               | 63                  | 12.48                | 6  | 10    | 16    | 19.32                | 9                           |
| 47-2181   | Roofers   | 1,907             | 2,227             | 320                 | 16.78                | 32   | 44    | 76    | 14.79                | 10                          |
| 47-2211   | Sheet Metal Workers                               | 1,875             | 1,995             | 120                 | 6.40                 | 12   | 45    | 57    | 16.10                | 9                           |
| 47-2221   | Structural Iron and Steel Workers                 | 881               | 1,013             | 132                 | 14.98                | 13   | 17    | 30    | 19.46                | 9                           |

# Kentucky Statewide Occupational Employment Outlook

## Construction & Extraction Occs. (cont'd)

| Occupational |   | Employment* |           | Change    |         | Job Openings             |             |       | Average | Educ/    |
|--------------|---|-------------|-----------|-----------|---------|--------------------------|-------------|-------|---------|----------|
| Code         | Title   | 2006        | 2016      | 2006-2016 |         | Average Annual 2006-2016 |             |       | Wage    | Training |
|              |   | Estimated   | Projected | Number    | Percent | Growth                   | Separations | Total | 2007    | Req'd~   |
| 47-3000      | Helpers, Construction Trades                        | 4,238       | 4,520     | 282       | 6.65    | 33                       | 176         | 209   | n/a     | n/a      |
| 47-3011      | Helpers--Brick, Block, Stone, Tile & Marble Setters | 602         | 658       | 56        | 9.30    | 6                        | 25          | 31    | 13.11   | 11       |
| 47-3012      | Helpers--Carpenters                                 | 826         | 961       | 135       | 16.34   | 14                       | 34          | 48    | 9.25    | 11       |
| 47-3013      | Helpers--Electricians                               | 1,056       | 1,013     | -43       | -4.07   | 0                        | 44          | 44    | 11.60   | 11       |
| 47-3014      | Helpers--Painter, Paperhanger, Plasterer & Stucco   | *           | *         | *         | *       | *                        | *           | *     | 9.91    | 11       |
| 47-3015      | Helpers--Pipelayer & fitter, Plumber & Steamfitter  | 1,321       | 1,429     | 108       | 8.18    | 11                       | 55          | 66    | 11.97   | 11       |
| 47-3016      | Helpers--Roofers                                    | 227         | 252       | 25        | 11.01   | 3                        | 9           | 12    | 10.74   | 11       |
| 47-3019      | Helpers, Construction Trades, All Other             | 150         | 143       | -7        | -4.67   | 0                        | 6           | 6     | 10.14   | 11       |
| 47-4000      | Other Construction and Related Workers              | 5,761       | 6,709     | 948       | 16.46   | 96                       | 102         | 198   | n/a     | n/a      |
| 47-4011      | Construction and Building Inspectors                | 883         | 1,065     | 182       | 20.61   | 18                       | 20          | 38    | 20.76   | 8        |
| 47-4021      | Elevator Installers and Repairers                   | 143         | 151       | 8         | 5.59    | 1                        | 4           | 5     | 29.90   | 9        |
| 47-4031      | Fence Erectors                                      | 677         | 820       | 143       | 21.12   | 14                       | 10          | 24    | 11.40   | 10       |
| 47-4041      | Hazardous Materials Removal Workers                 | 469         | 549       | 80        | 17.06   | 8                        | 12          | 20    | 17.22   | 10       |
| 47-4051      | Highway Maintenance Workers                         | 2,563       | 3,032     | 469       | 18.30   | 47                       | 37          | 84    | 12.20   | 10       |
| 47-4061      | Rail-Track Laying and Maint. Equip. Operators       | *           | *         | *         | *       | *                        | *           | *     | n/a     | 10       |
| 47-4071      | Septic Tank Servicers and Sewer Pipe Cleaners       | 187         | 224       | 37        | 19.79   | 4                        | 5           | 9     | 10.58   | 10       |
| 47-4099      | Construction and Related Workers, All Other         | 751         | 796       | 45        | 5.99    | 5                        | 12          | 17    | 11.88   | 10       |
| 47-5000      | Extraction Workers                                  | 6,665       | 7,526     | 861       | 12.92   | 86                       | 174         | 260   | n/a     | n/a      |
| 47-5011      | Derrick Operators, Oil and Gas                      | 104         | 119       | 15        | 14.42   | 2                        | 3           | 5     | n/a     | 10       |
| 47-5012      | Rotary Drill Operators, Oil and Gas                 | 219         | 251       | 32        | 14.61   | 3                        | 6           | 9     | 14.11   | 10       |
| 47-5013      | Service Unit Operators, Oil, Gas, and Mining        | 313         | 361       | 48        | 15.34   | 5                        | 9           | 14    | 15.55   | 10       |
| 47-5021      | Earth Drillers, Excl. Oil and Gas                   | 757         | 880       | 123       | 16.25   | 12                       | 16          | 28    | 15.42   | 10       |
| 47-5031      | Explosives Workers, Ordnance Handling & Blasters    | 622         | 645       | 23        | 3.70    | 2                        | 24          | 26    | 17.70   | 10       |
| 47-5041      | Continuous Mining Machine Operators                 | 563         | 710       | 147       | 26.11   | 15                       | 16          | 31    | 19.85   | 10       |
| 47-5042      | Mine Cutting and Channeling Machine Operators       | 229         | 287       | 58        | 25.33   | 6                        | 7           | 13    | 19.62   | 10       |
| 47-5049      | Mining Machine Operators, All Other                 | 225         | 257       | 32        | 14.22   | 3                        | 6           | 9     | n/a     | 10       |
| 47-5051      | Rock Splitters, Quarry                              | *           | *         | *         | *       | *                        | *           | *     | n/a     | 10       |
| 47-5061      | Roof Bolters, Mining                                | *           | *         | *         | *       | *                        | *           | *     | 19.28   | 10       |
| 47-5071      | Roustabouts, Oil and Gas                            | 236         | 263       | 27        | 11.44   | 3                        | 7           | 10    | 15.68   | 10       |
| 47-5081      | Helpers--Extraction Workers                         | 1,172       | 1,335     | 163       | 13.91   | 16                       | 33          | 49    | 14.98   | 11       |
| 47-5099      | Extraction Workers, All Other                       | 1,002       | 1,159     | 157       | 15.67   | 16                       | 25          | 41    | 16.56   | 10       |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide Occupational Employment Outlook

## Installation, Maintenance & Repair Occs.

| Occupational  |   | Employment* |           | Change    |         | Job Openings             |             |       | Average | Educ/    |
|---|---|-------------|-----------|-----------|---------|--------------------------|-------------|-------|---------|----------|
| Code  | Title   | 2006        | 2016      | 2006-2016 |         | Average Annual 2006-2016 |             |       | Wage    | Training |
|   |   | Estimated   | Projected | Number    | Percent | Growth                   | Separations | Total | 2007    | Req'd~   |
| 49-0000 Installation, Maintenance, and Repair Occupations |   | 88,438      | 95,951    | 7,513     | 8.50    | 773                      | 2,007       | 2,780 | 17.47   | n/a      |
| 49-1000   | Supervisors of Installation, Maint. & Repair Workers  | 7,940       | 8,614     | 674       | 8.49    | 67                       | 199         | 266   | n/a     | n/a      |
| 49-1011   | Managers of Mechanics, Installers, and Repairers      | 7,940       | 8,614     | 674       | 8.49    | 67                       | 199         | 266   | 24.34   | 8        |
| 49-2000   | Electrical & Electronic Equip. Mechanics & Installers | 9,094       | 9,505     | 411       | 4.52    | 47                       | 172         | 219   | n/a     | n/a      |
| 49-2011   | Computer, Automated Teller & Office Mach. Repair      | 2,434       | 2,394     | -40       | -1.64   | 0                        | 30          | 30    | 16.08   | 7        |
| 49-2021   | Radio Mechanics                                       | *           | *         | *         | *       | *                        | *           | *     | 18.17   | 7        |
| 49-2022   | Telecommunications Equip. Installers & Repairers      | 2,905       | 2,995     | 90        | 3.10    | 9                        | 60          | 69    | 23.02   | 9        |
| 49-2091   | Avionics Technicians                                  | 249         | 290       | 41        | 16.47   | 4                        | 6           | 10    | 21.79   | 7        |
| 49-2092   | Electric Motor, Power Tool, and Related Repairers     | 678         | 849       | 171       | 25.22   | 17                       | 16          | 33    | 13.62   | 7        |
| 49-2093   | Elec. & Electron. Install. & Repair., Transp. Equip.  | *           | *         | *         | *       | *                        | *           | *     | n/a     | 7        |
| 49-2094   | Elec. & Electron. Repair- Comm. & Ind. Equip.         | 1,084       | 1,142     | 58        | 5.35    | 6                        | 24          | 30    | 21.71   | 7        |
| 49-2095   | Elec. & Electron. Repair- Pwrhouse, Subst. & Relay    | 228         | 233       | 5         | 2.19    | 1                        | 5           | 6     | 28.69   | 7        |
| 49-2096   | Electron. Equip. Install. & Repair., Motor Vehicles   | 280         | 290       | 10        | 3.57    | 1                        | 7           | 8     | 15.74   | 7        |
| 49-2097   | Electron. Home Entertain. Equip. Install & Repair     | 506         | 494       | -12       | -2.37   | 0                        | 10          | 10    | 14.02   | 7        |
| 49-2098   | Security and Fire Alarm Systems Installers            | 606         | 698       | 92        | 15.18   | 9                        | 12          | 21    | 15.37   | 7        |
| 49-3000   | Vehicle and Mobile Equip. Mechanics, Installers       | 25,311      | 27,725    | 2,414     | 9.54    | 250                      | 650         | 900   | n/a     | n/a      |
| 49-3011   | Aircraft Mechanics and Service Technicians            | 1,628       | 1,807     | 179       | 11.00   | 18                       | 38          | 56    | 23.05   | 7        |
| 49-3021   | Automotive Body and Related Repairers                 | 2,183       | 2,281     | 98        | 4.49    | 10                       | 44          | 54    | 16.47   | 9        |
| 49-3022   | Automotive Glass Installers and Repairers             | 573         | 629       | 56        | 9.77    | 6                        | 11          | 17    | 15.83   | 9        |
| 49-3023   | Automotive Service Technicians and Mechanics          | 9,591       | 10,504    | 913       | 9.52    | 91                       | 255         | 346   | 14.94   | 7        |
| 49-3031   | Bus & Truck Mechanics & Diesel Eng. Specialists       | 4,452       | 5,052     | 600       | 13.48   | 60                       | 115         | 175   | 16.45   | 7        |
| 49-3041   | Farm Equipment Mechanics                              | 563         | 593       | 30        | 5.33    | 3                        | 12          | 15    | 12.08   | 7        |
| 49-3042   | Mobile Heavy Equip. Mechanics, Excl. Engines          | 3,169       | 3,574     | 405       | 12.78   | 41                       | 69          | 110   | 18.91   | 7        |
| 49-3043   | Rail Car Repairers                                    | 213         | 198       | -15       | -7.04   | 0                        | 5           | 5     | 16.75   | 9        |
| 49-3051   | Motorboat Mechanics                                   | 316         | 381       | 65        | 20.57   | 7                        | 8           | 15    | 13.37   | 9        |
| 49-3052   | Motorcycle Mechanics                                  | 227         | 274       | 47        | 20.70   | 5                        | 6           | 11    | 13.63   | 9        |
| 49-3053   | Outdoor Power Equip. & Other Small Eng. Mech.         | 787         | 873       | 86        | 10.93   | 9                        | 20          | 29    | 11.52   | 10       |
| 49-3091   | Bicycle Repairers                                     | *           | *         | *         | *       | *                        | *           | *     | 14.77   | 10       |
| 49-3092   | Recreational Vehicle Service Technicians              | *           | *         | *         | *       | *                        | *           | *     | 14.20   | 9        |
| 49-3093   | Tire Repairers and Changers                           | 1,484       | 1,413     | -71       | -4.78   | 0                        | 63          | 63    | 10.24   | 11       |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide Occupational Employment Outlook

## Installation, Maintenance & Repair Occs. (cont'd)

| Occupational   |   | Employment*   |               | Change<br>2006-2016 |             | Job Openings<br>Average Annual 2006-2016 |             |              | Average<br>Wage<br>2007 | Educ/<br>Training<br>Req'd~ |
|----------------|---|---------------|---------------|---------------------|-------------|--|-------------|--------------|-------------------------|-----------------------------|
| Code           | Title   | Estimated     | Projected     | Number              | Percent     | Growth                                   | Separations | Total        |                         |                             |
| <b>49-9000</b> | <b>Other Installation, Maintenance &amp; Repair Occs.</b> | <b>46,093</b> | <b>50,107</b> | <b>4,014</b>        | <b>8.71</b> | <b>409</b>                               | <b>986</b>  | <b>1,395</b> | <b>n/a</b>              | <b>n/a</b>                  |
| 49-9011        | Mechanical Door Repairers                                 | *             | *             | *                   | *           | *  | *           | *            | 17.45                   | 10                          |
| 49-9012        | Control & Valve Install. & Repair., Excl. Mech. Door      | 879           | 966           | 87                  | 9.90        | 9  | 22          | 31           | 15.42                   | 10                          |
| 49-9021        | Heating, A.C. & Refrigeration Mech. & Installers          | 3,968         | 4,626         | 658                 | 16.58       | 66                                       | 53          | 119          | 16.22                   | 9                           |
| 49-9031        | Home Appliance Repairers                                  | 1,053         | 1,027         | -26                 | -2.47       | 0  | 25          | 25           | 16.61                   | 9                           |
| 49-9041        | Industrial Machinery Mechanics                            | 8,272         | 8,420         | 148                 | 1.79        | 15                                       | 167         | 182          | 19.73                   | 9                           |
| 49-9042        | Maintenance and Repair Workers, General                   | 18,081        | 19,959        | 1,878               | 10.39       | 188                                      | 347         | 535          | 15.41                   | 10                          |
| 49-9043        | Maintenance Workers, Machinery                            | 1,386         | 1,419         | 33                  | 2.38        | 3  | 31          | 34           | 17.43                   | 11                          |
| 49-9044        | Millwrights   | 744           | 765           | 21                  | 2.82        | 2  | 18          | 20           | 24.55                   | 9                           |
| 49-9045        | Refractory Materials Repairers, Excl. Brickmasons         | *             | *             | *                   | *           | *  | *           | *            | n/a                     | 10                          |
| 49-9051        | Electrical Power-Line Installers and Repairers            | 2,937         | 3,161         | 224                 | 7.63        | 22                                       | 93          | 115          | 21.46                   | 9                           |
| 49-9052        | Telecommunications Line Installers and Repairers          | 1,555         | 1,756         | 201                 | 12.93       | 20                                       | 42          | 62           | 15.78                   | 9                           |
| 49-9061        | Camera and Photographic Equipment Repairers               | *             | *             | *                   | *           | *  | *           | *            | n/a                     | 10                          |
| 49-9062        | Medical Equipment Repairers                               | 851           | 1,020         | 169                 | 19.86       | 17                                       | 24          | 41           | 18.18                   | 6                           |
| 49-9063        | Musical Instrument Repairers and Tuners                   | 158           | 158           | 0                   | 0.00        | 0  | 4           | 4            | 16.69                   | 9                           |
| 49-9064        | Watch Repairers   | *             | *             | *                   | *           | *  | *           | *            | n/a                     | 9                           |
| 49-9069        | Precision Instrument & Equip. Repairers, Other            | 517           | 552           | 35                  | 6.77        | 4  | 15          | 19           | 22.61                   | 10                          |
| 49-9091        | Coin, Vending & Amusement Mach. Serv. & Repair.           | 400           | 362           | -38                 | -9.50       | 0  | 10          | 10           | 13.17                   | 10                          |
| 49-9092        | Commercial Divers   | *             | *             | *                   | *           | *  | *           | *            | n/a                     | 10                          |
| 49-9093        | Fabric Menders, Excl. Garment                             | *             | *             | *                   | *           | *  | *           | *            | n/a                     | 10                          |
| 49-9094        | Locksmiths and Safe Repairers                             | 210           | 243           | 33                  | 15.71       | 3  | 7           | 10           | 12.26                   | 10                          |
| 49-9095        | Manufactured Building and Mobile Home Installers          | 137           | 129           | -8                  | -5.84       | 0  | 3           | 3            | 13.61                   | 10                          |
| 49-9096        | Riggers   | *             | *             | *                   | *           | *  | *           | *            | n/a                     | 11                          |
| 49-9097        | Signal and Track Switch Repairers                         | *             | *             | *                   | *           | *  | *           | *            | n/a                     | 10                          |
| 49-9098        | Helpers--Installation, Maint. & Repair Workers            | 1,086         | 1,187         | 101                 | 9.30        | 10                                       | 37          | 47           | 10.75                   | 11                          |
| 49-9099        | Installation, Maint. & Repair Workers, All Other          | 3,650         | 4,132         | 482                 | 13.21       | 48                                       | 83          | 131          | 16.23                   | 10                          |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide Occupational Employment Outlook

## Production Occupations

| Occupational                   |  | Employment*       |                   | Change              |                      | Job Openings             |             |       | Average Wage<br>2007 | Educ/<br>Training<br>Req'd~ |
|--------------------------------|--|-------------------|-------------------|---------------------|----------------------|--------------------------|-------------|-------|----------------------|-----------------------------|
| Code                           | Title  | 2006<br>Estimated | 2016<br>Projected | 2006-2016<br>Number | 2006-2016<br>Percent | Average Annual 2006-2016 |             |       |                      |                             |
|                                |  |                   |                   |                     |                      | Growth                   | Separations | Total |                      |                             |
| 51-0000 Production Occupations |  | 211,446           | 204,679           | -6,767              | -3.20                | 361                      | 5,145       | 5,506 | 14.89                | n/a                         |
| 51-1000                        | Supervisors, Production Workers                    | 13,165            | 13,350            | 185                 | 1.41                 | 19                       | 276         | 295   | n/a                  | n/a                         |
| 51-1011                        | Managers of Production and Operating Workers       | 13,165            | 13,350            | 185                 | 1.41                 | 19                       | 276         | 295   | 23.54                | 8                           |
| 51-2000                        | Assemblers and Fabricators                         | 54,763            | 53,931            | -832                | -1.52                | 80                       | 1,410       | 1,490 | n/a                  | n/a                         |
| 51-2011                        | Aircraft Structure, Surface, Rig & Systems Assemb. | *                 | *                 | *                   | *                    | *                        | *           | *     | n/a                  | 9                           |
| 51-2021                        | Coil Winders, Tapers, and Finishers                | 433               | 318               | -115                | -26.56               | 0                        | 10          | 10    | 12.67                | 11                          |
| 51-2022                        | Electrical and Electronic Equipment Assemblers     | 1,190             | 1,104             | -86                 | -7.23                | 0                        | 28          | 28    | 13.04                | 11                          |
| 51-2023                        | Electromechanical Equipment Assemblers             | 282               | 238               | -44                 | -15.60               | 0                        | 7           | 7     | 14.26                | 11                          |
| 51-2031                        | Engine and Other Machine Assemblers                | 428               | 399               | -29                 | -6.78                | 0                        | 12          | 12    | n/a                  | 11                          |
| 51-2041                        | Structural Metal Fabricators and Fitters           | 1,161             | 1,158             | -3                  | -0.26                | 0                        | 27          | 27    | 15.48                | 10                          |
| 51-2091                        | Fiberglass Laminators and Fabricators              | 214               | 247               | 33                  | 15.42                | 3                        | 6           | 9     | 13.06                | 10                          |
| 51-2092                        | Team Assemblers                                    | 33,007            | 33,770            | 763                 | 2.31                 | 76                       | 853         | 929   | 14.31                | 10                          |
| 51-2093                        | Timing Device Assemblers, Adjusters & Calibrators  | *                 | *                 | *                   | *                    | *                        | *           | *     | n/a                  | 10                          |
| 51-2099                        | Assemblers and Fabricators, All Other              | 17,979            | 16,622            | -1,357              | -7.55                | 0                        | 465         | 465   | n/a                  | 10                          |
| 51-3000                        | Food Processing Workers                            | 8,731             | 9,146             | 415                 | 4.75                 | 50                       | 201         | 251   | n/a                  | n/a                         |
| 51-3011                        | Bakers   | 1,184             | 1,286             | 102                 | 8.61                 | 10                       | 28          | 38    | 9.51                 | 9                           |
| 51-3021                        | Butchers and Meat Cutters                          | 1,944             | 1,860             | -84                 | -4.32                | 0                        | 43          | 43    | 11.80                | 9                           |
| 51-3022                        | Meat, Poultry, and Fish Cutters and Trimmers       | 1,878             | 2,080             | 202                 | 10.76                | 20                       | 41          | 61    | 10.81                | 11                          |
| 51-3023                        | Slaughterers and Meat Packers                      | 1,190             | 1,284             | 94                  | 7.90                 | 9                        | 26          | 35    | 9.98                 | 10                          |
| 51-3091                        | Food & Tobacco Roast., Baking, Drying Mach. Ops.   | 575               | 590               | 15                  | 2.61                 | 2                        | 16          | 18    | 13.86                | 11                          |
| 51-3092                        | Food Batchmakers                                   | 1,391             | 1,469             | 78                  | 5.61                 | 8                        | 34          | 42    | 12.87                | 11                          |
| 51-3093                        | Food Cooking Machine Operators and Tenders         | 569               | 577               | 8                   | 1.41                 | 1                        | 13          | 14    | 11.42                | 11                          |
| 51-4000                        | Metal Workers and Plastic Workers                  | 45,309            | 43,039            | -2,270              | -5.01                | 64                       | 1,112       | 1,176 | n/a                  | n/a                         |
| 51-4011                        | Computer-Controlled Machine Tool Operators         | 2,259             | 2,229             | -30                 | -1.33                | 0                        | 37          | 37    | 14.94                | 10                          |
| 51-4012                        | Numerical Tool and Process Control Programmers     | 161               | 153               | -8                  | -4.97                | 0                        | 3           | 3     | 19.76                | 9                           |
| 51-4021                        | Extruding & Drawing Mach. Setters, Ops. & Tenders  | 2,110             | 1,650             | -460                | -21.80               | 0                        | 70          | 70    | 15.02                | 10                          |
| 51-4022                        | Forging Machine Setters, Operators & Tenders       | 603               | 537               | -66                 | -10.95               | 0                        | 9           | 9     | 12.80                | 10                          |
| 51-4023                        | Rolling Machine Setters, Operators, and Tenders    | 1,965             | 1,944             | -21                 | -1.07                | 0                        | 44          | 44    | 16.99                | 10                          |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch



# Kentucky Statewide Occupational Employment Outlook

## Production Occupations (cont'd)

| Occupational   |  | Employment*  |              | Change<br>2006-2016 |              | Job Openings<br>Average Annual 2006-2016 |             |            | Average<br>Wage<br>2007 | Educ/<br>Training<br>Req'd~ |
|----------------|--|--------------|--------------|---------------------|--------------|--|-------------|------------|-------------------------|-----------------------------|
| Code           | Title  | Estimated    | Projected    | Number              | Percent      | Growth                                   | Separations | Total      |                         |                             |
| 51-4031        | Cut, Punch & Press Mach. Setters, Ops. & Tenders   | 6,568        | 5,343        | -1,225              | -18.65       | 0  | 152         | 152        | 13.11                   | 10                          |
| 51-4032        | Drill & Boring Mach. Tool Setters, Ops. & Tenders  | 752          | 676          | -76                 | -10.11       | 0  | 22          | 22         | 15.54                   | 10                          |
| 51-4033        | Grind, Lap, Polish & Buff Mach. Tool Setters, Ops. | 1,269        | 1,113        | -156                | -12.29       | 0  | 24          | 24         | 13.06                   | 10                          |
| 51-4034        | Lathe & Turning Mach. Tool Setters, Ops. & Tenders | 1,163        | 1,101        | -62                 | -5.33        | 0  | 22          | 22         | 14.94                   | 10                          |
| 51-4035        | Milling & Planing Machine Setters, Ops. & Tenders  | 351          | 358          | 7                   | 1.99         | 1  | 6           | 7          | 14.66                   | 10                          |
| 51-4041        | Machinists   | 5,982        | 6,269        | 287                 | 4.80         | 29                                       | 139         | 168        | 15.65                   | 9                           |
| 51-4051        | Metal-Refining Furnace Operators and Tenders       | 360          | 341          | -19                 | -5.28        | 0  | 8           | 8          | 17.55                   | 10                          |
| 51-4052        | Pourers and Casters, Metal                         | 352          | 269          | -83                 | -23.58       | 0  | 8           | 8          | 14.24                   | 10                          |
| 51-4061        | Model Makers, Metal and Plastic                    | *            | *            | *                   | *            | *  | *           | *          | 20.05                   | 10                          |
| 51-4062        | Patternmakers, Metal and Plastic                   | *            | *            | *                   | *            | *  | *           | *          | n/a                     | 10                          |
| 51-4071        | Foundry Mold and Coremakers                        | *            | *            | *                   | *            | *  | *           | *          | n/a                     | 10                          |
| 51-4072        | Molding, Coremaking & Casting Mach. Setters, Ops.  | 4,212        | 3,840        | -372                | -8.83        | 0  | 105         | 105        | 12.36                   | 10                          |
| 51-4081        | Multiple Mach. Tool Setters, Ops. & Tenders        | 1,899        | 1,897        | -2                  | -0.11        | 0  | 52          | 52         | 14.10                   | 10                          |
| 51-4111        | Tool and Die Makers                                | 2,640        | 2,590        | -50                 | -1.89        | 0  | 60          | 60         | 21.65                   | 9                           |
| 51-4121        | Welders, Cutters, Solderers, and Brazers           | 8,363        | 8,692        | 329                 | 3.93         | 33                                       | 236         | 269        | 15.01                   | 9                           |
| 51-4122        | Welding, Soldering & Brazing Mach. Setters, Ops.   | 1,613        | 1,620        | 7                   | 0.43         | 1  | 46          | 47         | 14.61                   | 10                          |
| 51-4191        | Heat Treating Equip. Setters, Ops. & Tenders       | 553          | 511          | -42                 | -7.59        | 0  | 17          | 17         | 16.75                   | 10                          |
| 51-4192        | Lay-Out Workers, Metal and Plastic                 | 119          | 117          | -2                  | -1.68        | 0  | 2           | 2          | 14.45                   | 10                          |
| 51-4193        | Plating & Coating Mach. Setters, Ops. & Tenders    | 713          | 625          | -88                 | -12.34       | 0  | 16          | 16         | 14.57                   | 10                          |
| 51-4194        | Tool Grinders, Filers, and Sharpeners              | 231          | 242          | 11                  | 4.76         | 1  | 8           | 9          | 13.41                   | 10                          |
| 51-4199        | Metal Workers and Plastic Workers, All Other       | 962          | 823          | -139                | -14.45       | 0  | 23          | 23         | 18.98                   | 10                          |
| <b>51-5000</b> | <b>Printing Workers</b>                            | <b>6,232</b> | <b>5,973</b> | <b>-259</b>         | <b>-4.16</b> | <b>4</b>                                 | <b>150</b>  | <b>154</b> | <b>n/a</b>              | <b>n/a</b>                  |
| 51-5011        | Bindery Workers                                    | 1,355        | 1,158        | -197                | -14.54       | 0  | 36          | 36         | 14.15                   | 11                          |
| 51-5012        | Bookbinders  | 170          | 163          | -7                  | -4.12        | 0  | 5           | 5          | 10.67                   | 10                          |
| 51-5021        | Job Printers                                       | 517          | 556          | 39                  | 7.54         | 4  | 12          | 16         | 13.34                   | 9                           |
| 51-5022        | Prepress Technicians and Workers                   | 1,154        | 1,061        | -93                 | -8.06        | 0  | 27          | 27         | 15.80                   | 7                           |
| 51-5023        | Printing Machine Operators                         | 3,036        | 3,035        | -1                  | -0.03        | 0  | 71          | 71         | 15.68                   | 10                          |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide Occupational Employment Outlook

## Production Occupations (cont'd)

| Occupational |   | Employment*       |                   | Change              |                      | Job Openings             |             |       | Average Wage<br>2007 | Educ/<br>Training<br>Req'd~ |
|--------------|---|-------------------|-------------------|---------------------|----------------------|--------------------------|-------------|-------|----------------------|-----------------------------|
| Code         | Title   | 2006<br>Estimated | 2016<br>Projected | 2006-2016<br>Number | 2006-2016<br>Percent | Average Annual 2006-2016 |             |       |                      |                             |
|              |   |                   |                   |                     |                      | Growth                   | Separations | Total |                      |                             |
| 51-6000      | Textile, Apparel, and Furnishings Workers         | 12,894            | 10,141            | -2,753              | -21.35               | 0                        | 237         | 237   | n/a                  | n/a                         |
| 51-6011      | Laundry and Dry-Cleaning Workers                  | 3,427             | 3,324             | -103                | -3.01                | 0                        | 93          | 93    | 8.34                 | 10                          |
| 51-6021      | Pressers, Textile, Garment, and Related Materials | 771               | 633               | -138                | -17.90               | 0                        | 12          | 12    | 8.49                 | 11                          |
| 51-6031      | Sewing Machine Operators                          | 5,544             | 3,623             | -1,921              | -34.65               | 0                        | 69          | 69    | 9.18                 | 10                          |
| 51-6041      | Shoe and Leather Workers and Repairers            | 151               | 115               | -36                 | -23.84               | 0                        | 5           | 5     | 10.55                | 9                           |
| 51-6042      | Shoe Machine Operators and Tenders                | *                 | *                 | *                   | *                    | *                        | *           | *     | n/a                  | 10                          |
| 51-6051      | Sewers, Hand                                      | *                 | *                 | *                   | *                    | *                        | *           | *     | 10.96                | 11                          |
| 51-6052      | Tailors, Dressmakers, and Custom Sewers           | 1,119             | 1,096             | -23                 | -2.06                | 0                        | 20          | 20    | 12.17                | 9                           |
| 51-6061      | Textile Bleaching & Dyeing Mach. Ops. & Tenders   | *                 | *                 | *                   | *                    | *                        | *           | *     | n/a                  | 10                          |
| 51-6062      | Textile Cutting Mach. Setters, Ops. & Tenders     | 173               | 130               | -43                 | -24.86               | 0                        | 4           | 4     | 11.22                | 10                          |
| 51-6063      | Textile Knitting & Weaving Mach. Setters, Ops.    | 414               | 203               | -211                | -50.97               | 0                        | 5           | 5     | n/a                  | 9                           |
| 51-6064      | Textile Wind, Twist. & Drawing Out Mach. Setters  | *                 | *                 | *                   | *                    | *                        | *           | *     | n/a                  | 10                          |
| 51-6091      | Extruding & Forming Mach. Setters, Ops. & Tenders | 247               | 200               | -47                 | -19.03               | 0                        | 5           | 5     | 16.80                | 10                          |
| 51-6092      | Fabric and Apparel Patternmakers                  | *                 | *                 | *                   | *                    | *                        | *           | *     | n/a                  | 9                           |
| 51-6093      | Upholsterers                                      | 484               | 396               | -88                 | -18.18               | 0                        | 12          | 12    | 13.71                | 9                           |
| 51-6099      | Textile, Apparel & Furnishings Workers, All Other | *                 | *                 | *                   | *                    | *                        | *           | *     | n/a                  | 11                          |
| 51-7000      | Woodworkers                                       | 6,681             | 6,039             | -642                | -9.61                | 1                        | 174         | 175   | n/a                  | n/a                         |
| 51-7011      | Cabinetmakers and Bench Carpenters                | 1,675             | 1,685             | 10                  | 0.60                 | 1                        | 42          | 43    | 12.46                | 9                           |
| 51-7021      | Furniture Finishers                               | 485               | 358               | -127                | -26.19               | 0                        | 10          | 10    | 13.16                | 9                           |
| 51-7031      | Model Makers, Wood                                | *                 | *                 | *                   | *                    | *                        | *           | *     | n/a                  | 9                           |
| 51-7032      | Patternmakers, Wood                               | *                 | *                 | *                   | *                    | *                        | *           | *     | n/a                  | 9                           |
| 51-7041      | Sawing Machine Setters, Ops. & Tenders, Wood      | 1,307             | 1,108             | -199                | -15.23               | 0                        | 37          | 37    | 10.77                | 10                          |
| 51-7042      | Woodworking Machine Setters, Ops. & Tenders       | 2,984             | 2,677             | -307                | -10.29               | 0                        | 78          | 78    | 11.70                | 10                          |
| 51-7099      | Woodworkers, All Other                            | 223               | 205               | -18                 | -8.07                | 0                        | 6           | 6     | 10.66                | 10                          |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch



# Kentucky Statewide Occupational Employment Outlook

## Production Occupations (cont'd)

| Occupational |   | Employment* |           | Change    |         | Job Openings             |             |       | Average | Educ/    |
|--------------|---|-------------|-----------|-----------|---------|--------------------------|-------------|-------|---------|----------|
| Code         | Title   | 2006        | 2016      | 2006-2016 |         | Average Annual 2006-2016 |             |       | Wage    | Training |
|              |   | Estimated   | Projected | Number    | Percent | Growth                   | Separations | Total | 2007    | Req'd~   |
| 51-8000      | Plant and System Operators                              | 5,387       | 5,425     | 38        | 0.71    | 28                       | 163         | 191   | n/a     | n/a      |
| 51-8012      | Power Distributors and Dispatchers                      | 143         | 149       | 6         | 4.20    | 1                        | 4           | 5     | 31.61   | 9        |
| 51-8013      | Power Plant Operators                                   | 520         | 496       | -24       | -4.62   | 0                        | 14          | 14    | 25.00   | 9        |
| 51-8021      | Stationary Engineers and Boiler Operators               | 544         | 606       | 62        | 11.40   | 6                        | 10          | 16    | 19.63   | 9        |
| 51-8031      | Water & Liquid Waste Treatment Plant & Sys. Ops.        | 1,627       | 1,837     | 210       | 12.91   | 21                       | 56          | 77    | 14.68   | 9        |
| 51-8091      | Chemical Plant and System Operators                     | 1,469       | 1,295     | -174      | -11.85  | 0                        | 46          | 46    | 23.76   | 9        |
| 51-8092      | Gas Plant Operators                                     | 352         | 349       | -3        | -0.85   | 0                        | 11          | 11    | 24.23   | 9        |
| 51-8093      | Petroleum Pump System Ops., Refinery Ops.               | 498         | 456       | -42       | -8.43   | 0                        | 15          | 15    | 19.75   | 9        |
| 51-8099      | Plant and System Operators, All Other                   | 234         | 237       | 3         | 1.28    | 0                        | 7           | 7     | 21.50   | 9        |
| 51-9000      | Other Production Occupations                            | 58,284      | 57,635    | -649      | -1.11   | 115                      | 1,422       | 1,537 | n/a     | n/a      |
| 51-9011      | Chemical Equipment Operators and Tenders                | 1,169       | 1,148     | -21       | -1.80   | 0                        | 37          | 37    | 23.94   | 10       |
| 51-9012      | Separate, Filter, Clarify, Precipite & Still Mach. Ops. | 571         | 602       | 31        | 5.43    | 3                        | 18          | 21    | 16.53   | 10       |
| 51-9021      | Crush, Grind & Polish Mach. Setters, Ops. & Tenders     | 544         | 559       | 15        | 2.76    | 2                        | 14          | 16    | 16.45   | 10       |
| 51-9022      | Grinding and Polishing Workers, Hand                    | 386         | 359       | -27       | -6.99   | 0                        | 10          | 10    | 13.61   | 10       |
| 51-9023      | Mixing & Blending Mach. Setters, Ops. & Tenders         | 2,450       | 2,366     | -84       | -3.43   | 0                        | 64          | 64    | 14.67   | 10       |
| 51-9031      | Cutters and Trimmers, Hand                              | 236         | 256       | 20        | 8.47    | 2                        | 5           | 7     | 11.16   | 11       |
| 51-9032      | Cutting & Slicing Mach. Setters, Ops. & Tenders         | 2,249       | 2,163     | -86       | -3.82   | 0                        | 47          | 47    | 13.49   | 10       |
| 51-9041      | Extrude, Form, Press & Compact Mach. Ops.               | 3,577       | 3,744     | 167       | 4.67    | 17                       | 94          | 111   | 13.88   | 10       |
| 51-9051      | Furnace, Kiln, Oven, Drier & Kettle Ops. & Tenders      | 612         | 558       | -54       | -8.82   | 0                        | 15          | 15    | 15.10   | 10       |
| 51-9061      | Inspectors, Testers, Sorters, Samplers & Weighers       | 10,482      | 10,287    | -195      | -1.86   | 0                        | 239         | 239   | 15.13   | 10       |
| 51-9071      | Jewelers and Precious Stone and Metal Workers           | 363         | 386       | 23        | 6.34    | 2                        | 7           | 9     | 18.85   | 7        |
| 51-9081      | Dental Laboratory Technicians                           | 656         | 660       | 4         | 0.61    | 0                        | 14          | 14    | 16.15   | 9        |
| 51-9082      | Medical Appliance Technicians                           | 113         | 112       | -1        | -0.89   | 0                        | 3           | 3     | 16.92   | 9        |
| 51-9083      | Ophthalmic Laboratory Technicians                       | 250         | 245       | -5        | -2.00   | 0                        | 6           | 6     | 12.55   | 10       |
| 51-9111      | Packaging & Filling Machine Ops. & Tenders              | 5,947       | 5,650     | -297      | -4.99   | 0                        | 118         | 118   | 12.84   | 11       |
| 51-9121      | Coating, Painting & Spraying Mach. Setters, Ops.        | 2,725       | 2,492     | -233      | -8.55   | 0                        | 71          | 71    | 13.27   | 10       |
| 51-9122      | Painters, Transportation Equipment                      | 854         | 876       | 22        | 2.58    | 2                        | 22          | 24    | n/a     | 9        |
| 51-9123      | Painting, Coating, and Decorating Workers               | 745         | 827       | 82        | 11.01   | 8                        | 20          | 28    | 11.11   | 11       |
| 51-9131      | Photographic Process Workers                            | 291         | 247       | -44       | -15.12  | 0                        | 7           | 7     | 10.11   | 10       |
| 51-9132      | Photographic Processing Machine Operators               | 584         | 451       | -133      | -22.77  | 0                        | 15          | 15    | n/a     | 11       |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide Occupational Employment Outlook

## Production Occupations (cont'd)

| Occupational |   | Employment* |           | Change<br>2006-2016 |         | Job Openings<br>Average Annual 2006-2016 |             |       | Average<br>Wage<br>2007 | Educ/<br>Training<br>Req'd~ |
|--------------|---|-------------|-----------|---------------------|---------|--|-------------|-------|-------------------------|-----------------------------|
| Code         | Title   | Estimated   | Projected | Number              | Percent | Growth                                   | Separations | Total |                         |                             |
| 51-9191      | Cementing & Gluing Machine Ops. & Tenders         | 318         | 306       | -12                 | -3.77   | 0  | 9           | 9     | 11.48                   | 10                          |
| 51-9192      | Clean, Wash & Metal Pickling Equip. Ops. & Tend.  | 514         | 543       | 29                  | 5.64    | 3  | 15          | 18    | 16.04                   | 10                          |
| 51-9193      | Cooling & Freezing Equipment Ops. & Tenders       | *           | *         | *                   | *       | *  | *           | *     | 17.16                   | 10                          |
| 51-9194      | Etchers and Engravers                             | 145         | 147       | 2                   | 1.38    | 0  | 4           | 4     | 11.82                   | 9                           |
| 51-9195      | Molders, Shapers & Casters, Excl. Metal & Plastic | 980         | 955       | -25                 | -2.55   | 0  | 23          | 23    | 11.94                   | 10                          |
| 51-9196      | Paper Goods Machine Setters, Ops. & Tenders       | 3,687       | 3,338     | -349                | -9.47   | 0  | 78          | 78    | 17.28                   | 10                          |
| 51-9197      | Tire Builders                                     | 262         | 280       | 18                  | 6.87    | 2  | 6           | 8     | 14.52                   | 10                          |
| 51-9198      | Helpers--Production Workers                       | 9,978       | 10,715    | 737                 | 7.39    | 74                                       | 280         | 354   | 10.96                   | 11                          |
| 51-9199      | Production Workers, All Other                     | 7,539       | 7,305     | -234                | -3.10   | 0  | 180         | 180   | 14.03                   | 10                          |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide Occupational Employment Outlook

## Transportation & Material Moving Occs.

| Occupational   |  | Employment*       |                   | Change                      |       | Job Openings   |       |       | Average Wage<br>2007 | Educ/<br>Training<br>Req'd~ |
|--|--|-------------------|-------------------|-----------------------------|-------|--|-------|-------|----------------------|-----------------------------|
| Code   | Title  | 2006<br>Estimated | 2016<br>Projected | 2006-2016<br>Number Percent |       | Average Annual 2006-2016<br>Growth Separations Total |       |       |                      |                             |
| 53-0000 Transportation and Material Moving Occupations |  | 166,537           | 182,131           | 15,594                      | 9.36  | 1,706  | 3,708 | 5,414 | 13.62                | n/a                         |
| 53-1000  | Supervisors, Transp. & Material Moving Workers     | 7,512             | 8,537             | 1,025                       | 13.64 | 103  | 177   | 280   | n/a                  | n/a                         |
| 53-1011  | Aircraft Cargo Handling Supervisors                | 391               | 469               | 78                          | 19.95 | 8  | 9     | 17    | n/a                  | 8                           |
| 53-1021  | Mgrs. of Helpers, Laborers & Material Movers, Hand | 2,726             | 2,975             | 249                         | 9.13  | 25   | 64    | 89    | 18.76                | 8                           |
| 53-1031  | Mgrs. of Transp., Material-Moving & Vehicle Ops.   | 4,395             | 5,093             | 698                         | 15.88 | 70   | 103   | 173   | 22.34                | 8                           |
| 53-2000  | Air Transportation Workers                         | 4,546             | 5,124             | 578                         | 12.71 | 58   | 121   | 179   | n/a                  | n/a                         |
| 53-2011  | Airline Pilots, Copilots, and Flight Engineers     | 4,081             | 4,632             | 551                         | 13.50 | 55   | 109   | 164   | n/a                  | 5                           |
| 53-2012  | Commercial Pilots                                  | 170               | 178               | 8                           | 4.71  | 1  | 5     | 6     | n/a                  | 7                           |
| 53-2021  | Air Traffic Controllers                            | 284               | 302               | 18                          | 6.34  | 2  | 7     | 9     | 54.69                | 9                           |
| 53-2022  | Airfield Operations Specialists                    | *                 | *                 | *                           | *     | *  | *     | *     | n/a                  | 9                           |
| 53-3000  | Motor Vehicle Operators                            | 68,685            | 78,191            | 9,506                       | 13.84 | 951  | 1,051 | 2,002 | n/a                  | n/a                         |
| 53-3011  | Ambulance Drivers & Attend., Excl. EMTs            | *                 | *                 | *                           | *     | *  | *     | *     | n/a                  | 10                          |
| 53-3021  | Bus Drivers, Transit and Intercity                 | 2,027             | 2,250             | 223                         | 11.00 | 22   | 44    | 66    | 14.48                | 10                          |
| 53-3022  | Bus Drivers, School                                | 8,689             | 9,773             | 1,084                       | 12.48 | 108  | 189   | 297   | 12.96                | 11                          |
| 53-3031  | Driver/Sales Workers                               | 6,857             | 7,549             | 692                         | 10.09 | 69   | 112   | 181   | 11.52                | 11                          |
| 53-3032  | Truck Drivers, Heavy and Tractor-Trailer           | 32,582            | 37,486            | 4,904                       | 15.05 | 490  | 532   | 1,022 | 16.52                | 10                          |
| 53-3033  | Truck Drivers, Light or Delivery Services          | 14,395            | 16,282            | 1,887                       | 13.11 | 189  | 132   | 321   | 12.63                | 11                          |
| 53-3041  | Taxi Drivers and Chauffeurs                        | 3,296             | 3,933             | 637                         | 19.33 | 64   | 30    | 94    | 9.26                 | 11                          |
| 53-3099  | Motor Vehicle Operators, All Other                 | 812               | 888               | 76                          | 9.36  | 8  | 11    | 19    | 13.20                | 11                          |
| 53-4000  | Rail Transportation Workers                        | *                 | *                 | *                           | *     | *  | *     | *     | n/a                  | n/a                         |
| 53-4011  | Locomotive Engineers                               | *                 | *                 | *                           | *     | *  | *     | *     | 21.82                | 10                          |
| 53-4012  | Locomotive Firers                                  | *                 | *                 | *                           | *     | *  | *     | *     | n/a                  | 10                          |
| 53-4013  | Rail Yard Engineers, Dinkey Ops. & Hostlers        | *                 | *                 | *                           | *     | *  | *     | *     | 16.88                | 10                          |
| 53-4021  | Railroad Brake, Signal, and Switch Operators       | *                 | *                 | *                           | *     | *  | *     | *     | 33.27                | 10                          |
| 53-4031  | Railroad Conductors and Yardmasters                | *                 | *                 | *                           | *     | *  | *     | *     | n/a                  | 10                          |
| 53-4099  | Rail Transportation Workers, All Other             | *                 | *                 | *                           | *     | *  | *     | *     | 19.88                | 10                          |
| 53-5000  | Water Transportation Workers                       | 1,981             | 2,216             | 235                         | 11.86 | 24   | 66    | 90    | n/a                  | n/a                         |
| 53-5011  | Sailors and Marine Oilers                          | 976               | 1,074             | 98                          | 10.04 | 10   | 34    | 44    | 15.96                | 11                          |
| 53-5021  | Captains, Mates, and Pilots of Water Vessels       | 796               | 876               | 80                          | 10.05 | 8  | 23    | 31    | 26.24                | 8                           |
| 53-5022  | Motorboat Operators                                | *                 | *                 | *                           | *     | *  | *     | *     | n/a                  | 10                          |
| 53-5031  | Ship Engineers                                     | 198               | 255               | 57                          | 28.79 | 6  | 9     | 15    | 26.24                | 7                           |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide Occupational Employment Outlook

## Transportation & Material Moving Occs. (cont'd)

| Occupational |   | Employment* |           | Change    |         | Job Openings             |             |       | Average | Educ/    |
|--------------|---|-------------|-----------|-----------|---------|--------------------------|-------------|-------|---------|----------|
| Code         | Title   | 2006        | 2016      | 2006-2016 |         | Average Annual 2006-2016 |             |       | Wage    | Training |
|              |   | Estimated   | Projected | Number    | Percent | Growth                   | Separations | Total | 2007    | Req'd~   |
| 53-6000      | Other Transportation Workers                      | 2,921       | 2,853     | -68       | -2.33   | 5                        | 108         | 113   | n/a     | n/a      |
| 53-6011      | Bridge and Lock Tenders                           | *           | *         | *         | *       | *                        | *           | *     | 21.11   | 11       |
| 53-6021      | Parking Lot Attendants                            | 742         | 639       | -103      | -13.88  | 0                        | 22          | 22    | 8.88    | 11       |
| 53-6031      | Service Station Attendants                        | 1,533       | 1,541     | 8         | 0.52    | 1                        | 69          | 70    | 9.89    | 11       |
| 53-6041      | Traffic Technicians                               | *           | *         | *         | *       | *                        | *           | *     | n/a     | 11       |
| 53-6051      | Transportation Inspectors                         | 288         | 308       | 20        | 6.94    | 2                        | 7           | 9     | 26.98   | 8        |
| 53-6099      | Transportation Workers, All Other                 | 277         | 301       | 24        | 8.66    | 2                        | 8           | 10    | 11.23   | 11       |
| 53-7000      | Material Moving Workers                           | 79,784      | 84,229    | 4,445     | 5.57    | 562                      | 2,156       | 2,718 | n/a     | n/a      |
| 53-7011      | Conveyor Operators and Tenders                    | 950         | 988       | 38        | 4.00    | 4                        | 27          | 31    | 13.93   | 11       |
| 53-7021      | Crane and Tower Operators                         | 971         | 1,117     | 146       | 15.04   | 15                       | 21          | 36    | 18.18   | 9        |
| 53-7031      | Dredge Operators                                  | *           | *         | *         | *       | *                        | *           | *     | n/a     | 10       |
| 53-7032      | Excavating & Loading Machine & Dragline Ops.      | 1,975       | 2,296     | 321       | 16.25   | 32                       | 54          | 86    | 16.39   | 10       |
| 53-7033      | Loading Machine Operators, Underground Mining     | 559         | 679       | 120       | 21.47   | 12                       | 15          | 27    | 18.16   | 10       |
| 53-7041      | Hoist and Winch Operators                         | *           | *         | *         | *       | *                        | *           | *     | n/a     | 10       |
| 53-7051      | Industrial Truck and Tractor Operators            | 16,716      | 18,572    | 1,856     | 11.10   | 186                      | 317         | 503   | 13.81   | 11       |
| 53-7061      | Cleaners of Vehicles and Equipment                | 4,418       | 4,456     | 38        | 0.86    | 4                        | 154         | 158   | 9.45    | 11       |
| 53-7062      | Laborers & Freight, Stock & Material Movers, Hand | 34,239      | 36,894    | 2,655     | 7.75    | 266                      | 1,119       | 1,385 | 11.05   | 11       |
| 53-7063      | Machine Feeders and Offbearers                    | 5,700       | 4,757     | -943      | -16.54  | 0                        | 156         | 156   | 11.52   | 11       |
| 53-7064      | Packers and Packagers, Hand                       | 10,666      | 11,037    | 371       | 3.48    | 37                       | 200         | 237   | 9.50    | 11       |
| 53-7071      | Gas Compressor & Gas Pumping Station Ops.         | *           | *         | *         | *       | *                        | *           | *     | n/a     | 10       |
| 53-7072      | Pump Operators, Except Wellhead Pumpers           | *           | *         | *         | *       | *                        | *           | *     | 15.89   | 10       |
| 53-7073      | Wellhead Pumpers                                  | 280         | 251       | -29       | -10.36  | 0                        | 7           | 7     | 16.31   | 10       |
| 53-7081      | Refuse and Recyclable Material Collectors         | 1,384       | 1,449     | 65        | 4.70    | 7                        | 36          | 43    | 10.76   | 11       |
| 53-7111      | Shuttle Car Operators                             | *           | *         | *         | *       | *                        | *           | *     | 18.08   | 11       |
| 53-7121      | Tank Car, Truck, and Ship Loaders                 | 196         | 184       | -12       | -6.12   | 0                        | 6           | 6     | 13.80   | 10       |
| 53-7199      | Material Moving Workers, All Other                | 696         | 655       | -41       | -5.89   | 0                        | 19          | 19    | 15.91   | 10       |

\* Employment under 100 and unreliable data suppressed      n/a - Not Available      ~ Education/Training Required Codes- Page 76  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

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## A

|  |    |         |
|--|----|---------|
| Accountants & Auditors                             | 29 | 13-2011 |
| Actors   | 40 | 27-2011 |
| Actuaries  | 30 | 15-2011 |
| Adm. Law Judges, Adjudicators & Hearing Officers   | 36 | 23-1021 |
| Administrative Services Managers                   | 27 | 11-3011 |
| Adult Literacy, Remedial Ed. & GED Teachers        | 38 | 25-3011 |
| Advertising & Promotions Managers                  | 27 | 11-2011 |
| Advertising Sales Agents                           | 50 | 41-3011 |
| Aerospace Engineering & Operations Techs.          | 32 | 17-3021 |
| Aerospace Engineers                                | 31 | 17-2011 |
| Agents & Mgrs.- Artists, Performers & Athletes     | 29 | 13-1011 |
| Agricultural & Food Science Technicians            | 34 | 19-4011 |
| Agricultural Engineers                             | 31 | 17-2021 |
| Agricultural Equipment Operators                   | 53 | 45-2091 |
| Agricultural Inspectors                            | 53 | 45-2011 |
| Agricultural Sciences Teachers, Postsecondary **   | 37 | 25-1041 |
| Agricultural Workers, All Other                    | 53 | 45-2099 |
| Air Traffic Controllers                            | 63 | 53-2021 |
| Aircraft Cargo Handling Supervisors                | 63 | 53-1011 |
| Aircraft Mechanics & Service Technicians           | 56 | 49-3011 |
| Aircraft Structure, Surface, Rig & Systems Assemb. | 58 | 51-2011 |
| Airfield Operations Specialists                    | 63 | 53-2022 |
| Airline Pilots, Copilots, & Flight Engineers       | 63 | 53-2011 |
| Ambulance Drivers & Attend., Excl. EMTs            | 63 | 53-3011 |
| Amusement & Recreation Attendants                  | 48 | 39-3091 |
| Anesthesiologists                                  | 42 | 29-1061 |
| Animal Breeders                                    | 53 | 45-2021 |
| Animal Control Workers                             | 45 | 33-9011 |
| Animal Scientists                                  | 33 | 19-1011 |
| Animal Trainers                                    | 48 | 39-2011 |
| Anthropologists & Archeologists                    | 34 | 19-3091 |
| Anthropology & Archeology Teachers, Post. **       | 37 | 25-1061 |
| Appraisers & Assessors of Real Estate              | 29 | 13-2021 |
| Arbitrators, Mediators, & Conciliators             | 36 | 23-1022 |
| Architects, Excl. Landscape & Naval                | 31 | 17-1011 |
| Architectural & Civil Drafters                     | 32 | 17-3011 |
| Architecture Teachers, Postsecondary **            | 37 | 25-1031 |
| Archivists   | 38 | 25-4011 |
| Area, Ethnic & Cultural Studies Teachers, Post. ** | 37 | 25-1062 |
| Art Directors                                      | 40 | 27-1011 |
| Art, Drama, & Music Teachers, Postsecondary **     | 37 | 25-1121 |
| Artists & Related Workers, All Other               | 40 | 27-1019 |
| Assemblers & Fabricators, All Other                | 58 | 51-2099 |
| Astronomers  | 33 | 19-2011 |
| Athletes & Sports Competitors                      | 40 | 27-2021 |
| Athletic Trainers                                  | 43 | 29-9091 |
| Atmospheric & Space Scientists                     | 33 | 19-2021 |

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| Atmospheric, Earth, Marine & Space Sci., Post. ** | 37 | 25-1051 |
| Audio & Video Equipment Technicians               | 41 | 27-4011 |
| Audiologists                                      | 42 | 29-1121 |
| Audio-Visual Collections Specialists              | 39 | 25-9011 |
| Automotive Body & Related Repairers               | 56 | 49-3021 |
| Automotive Glass Installers & Repairers           | 56 | 49-3022 |
| Automotive Service Technicians & Mechanics        | 56 | 49-3023 |
| Avionics Technicians                              | 56 | 49-2091 |

## B

|   |    |         |
|---|----|---------|
| Baggage Porters & Bellhops                      | 48 | 39-6011 |
| Bailiffs  | 45 | 33-3011 |
| Bakers  | 58 | 51-3011 |
| Barbers   | 48 | 39-5011 |
| Bartenders                                      | 46 | 35-3011 |
| Bicycle Repairers                               | 56 | 49-3091 |
| Bill & Account Collectors                       | 51 | 43-3011 |
| Billing & Posting Clerks & Machine Operators    | 51 | 43-3021 |
| Bindery Workers                                 | 59 | 51-5011 |
| Biochemists & Biophysicists                     | 33 | 19-1021 |
| Biological Science Teachers, Postsecondary **   | 37 | 25-1042 |
| Biological Scientists, All Other                | 33 | 19-1029 |
| Biological Technicians                          | 34 | 19-4021 |
| Biomedical Engineers                            | 31 | 17-2031 |
| Boilermakers                                    | 54 | 47-2011 |
| Bookbinders                                     | 59 | 51-5012 |
| Bookkeeping, Accounting, & Auditing Clerks      | 51 | 43-3031 |
| Brickmasons & Blockmasons                       | 54 | 47-2021 |
| Bridge & Lock Tenders                           | 64 | 53-6011 |
| Broadcast News Analysts                         | 41 | 27-3021 |
| Broadcast Technicians                           | 41 | 27-4012 |
| Brokerage Clerks                                | 51 | 43-4011 |
| Budget Analysts                                 | 29 | 13-2031 |
| Building Cleaning Workers, All Other            | 47 | 37-2019 |
| Bus & Truck Mechanics & Diesel Eng. Specialists | 56 | 49-3031 |
| Bus Drivers, School                             | 63 | 53-3022 |
| Bus Drivers, Transit & Intercity                | 63 | 53-3021 |
| Business Operations Specialists, All Other      | 29 | 13-1199 |
| Business Teachers, Postsecondary **             | 37 | 25-1011 |
| Butchers & Meat Cutters                         | 58 | 51-3021 |

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| Cabinetmakers & Bench Carpenters                      | 60 | 51-7011 |
| Camera & Photographic Equipment Repairers             | 57 | 49-9061 |
| Camera Operators, TV, Video & Motion Picture          | 41 | 27-4031 |
| Captains, Mates, & Pilots of Water Vessels            | 63 | 53-5021 |
| Cardiovascular Technologists & Technicians            | 43 | 29-2031 |
| Cargo & Freight Agents                                | 52 | 43-5011 |
| Carpenters  | 54 | 47-2031 |
| Carpet Installers                                     | 54 | 47-2041 |
| Cartographers & Photogrammetrists                     | 31 | 17-1021 |
| Cashiers  | 50 | 41-2011 |
| Cement Masons & Concrete Finishers                    | 54 | 47-2051 |
| Cementing & Gluing Machine Ops. & Tenders             | 62 | 51-9191 |
| Chefs & Head Cooks                                    | 46 | 35-1011 |
| Chemical Engineers                                    | 31 | 17-2041 |
| Chemical Equipment Operators & Tenders                | 61 | 51-9011 |
| Chemical Plant & System Operators                     | 61 | 51-8091 |
| Chemical Technicians                                  | 34 | 19-4031 |
| Chemistry Teachers, Postsecondary **                  | 37 | 25-1052 |
| Chemists  | 33 | 19-2031 |
| Chief Executives                                      | 27 | 11-1011 |
| Child Care Workers                                    | 49 | 39-9011 |
| Child, Family, & School Social Workers                | 35 | 21-1021 |
| Chiropractors   | 42 | 29-1011 |
| Choreographers  | 40 | 27-2032 |
| Civil Engineering Technicians                         | 32 | 17-3022 |
| Civil Engineers                                       | 31 | 17-2051 |
| Claims Adjusters, Examiners, & Investigators          | 29 | 13-1031 |
| Clean, Wash & Metal Pickling Equip. Ops. & Tend.      | 62 | 51-9192 |
| Cleaners of Vehicles & Equipment                      | 64 | 53-7061 |
| Clergy  | 35 | 21-2011 |
| Clinical, Counseling, & School Psychologists          | 34 | 19-3031 |
| Coaches & Scouts                                      | 40 | 27-2022 |
| Coating, Painting & Spraying Mach. Setters, Ops.      | 61 | 51-9121 |
| Coil Winders, Tapers, & Finishers                     | 58 | 51-2021 |
| Coin, Vending & Amusement Mach. Serv. & Repair.       | 57 | 49-9091 |
| Combined Food Preparation & Service Workers           | 46 | 35-3021 |
| Commercial & Industrial Designers                     | 40 | 27-1021 |
| Commercial Divers                                     | 57 | 49-9092 |
| Commercial Pilots                                     | 63 | 53-2012 |
| Communications Equipment Operators, All Other         | 51 | 43-2099 |
| Communications Teachers, Postsecondary **             | 38 | 25-1122 |
| Community & Social Service Specialists, All Other     | 35 | 21-1099 |
| Compensation & Benefits Managers                      | 27 | 11-3041 |
| Compensation, Benefits & Job Analysis Specialists     | 29 | 13-1072 |
| Compliance Ofcr., Excl. Ag., Constr., Health & Trans. | 29 | 13-1041 |
| Computer & Information Scientists, Research           | 30 | 15-1011 |
| Computer & Information Systems Mgrs.                  | 27 | 11-3021 |

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| Computer Hardware Engineers                          | 31 | 17-2061 |
| Computer Operators                                   | 52 | 43-9011 |
| Computer Programmers                                 | 30 | 15-1021 |
| Computer Science Teachers, Postsecondary **          | 37 | 25-1021 |
| Computer Software Engineers, Applications            | 30 | 15-1031 |
| Computer Software Engineers, Systems Software        | 30 | 15-1032 |
| Computer Specialists, All Other                      | 30 | 15-1099 |
| Computer Support Specialists                         | 30 | 15-1041 |
| Computer Systems Analysts                            | 30 | 15-1051 |
| Computer, Automated Teller & Office Mach. Repair     | 56 | 49-2011 |
| Computer-Controlled Machine Tool Operators           | 58 | 51-4011 |
| Concierges   | 48 | 39-6012 |
| Conservation Scientists                              | 33 | 19-1031 |
| Construction & Building Inspectors                   | 55 | 47-4011 |
| Construction & Related Workers, All Other            | 55 | 47-4099 |
| Construction Laborers                                | 54 | 47-2061 |
| Construction Managers                                | 27 | 11-9021 |
| Continuous Mining Machine Operators                  | 55 | 47-5041 |
| Control & Valve Install. & Repair., Excl. Mech. Door | 57 | 49-9012 |
| Conveyor Operators & Tenders                         | 64 | 53-7011 |
| Cooks, All Other                                     | 46 | 35-2019 |
| Cooks, Fast Food                                     | 46 | 35-2011 |
| Cooks, Institution & Cafeteria                       | 46 | 35-2012 |
| Cooks, Private Household                             | 46 | 35-2013 |
| Cooks, Restaurant                                    | 46 | 35-2014 |
| Cooks, Short Order                                   | 46 | 35-2015 |
| Cooling & Freezing Equipment Ops. & Tenders          | 62 | 51-9193 |
| Correctional Officers & Jailers                      | 45 | 33-3012 |
| Correspondence Clerks                                | 51 | 43-4021 |
| Cost Estimators                                      | 29 | 13-1051 |
| Costume Attendants                                   | 48 | 39-3092 |
| Counselors, All Other                                | 35 | 21-1019 |
| Counter & Rental Clerks                              | 50 | 41-2021 |
| Counter Attendants, Cafeteria & Food Concession      | 46 | 35-3022 |
| Couriers & Messengers                                | 52 | 43-5021 |
| Court Reporters                                      | 36 | 23-2091 |
| Court, Municipal, & License Clerks                   | 51 | 43-4031 |
| Craft Artists  | 40 | 27-1012 |
| Crane & Tower Operators                              | 64 | 53-7021 |
| Credit Analysts                                      | 29 | 13-2041 |
| Credit Authorizers, Checkers, & Clerks               | 51 | 43-4041 |
| Crim. Justice & Law Enforcement Teachers, Post. **   | 37 | 25-1111 |
| Crossing Guards                                      | 45 | 33-9091 |
| Crush, Grind & Polish Mach. Setters, Ops. & Tenders  | 61 | 51-9021 |
| Curators   | 38 | 25-4012 |
| Customer Service Representatives                     | 51 | 43-4051 |
| Cut, Punch & Press Mach. Setters, Ops. & Tenders     | 59 | 51-4031 |
| Cutters & Trimmers, Hand                             | 61 | 51-9031 |
| Cutting & Slicing Mach. Setters, Ops. & Tenders      | 61 | 51-9032 |

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| Dancers   | 40 | 27-2031 |
| Data Entry Keyers                                 | 52 | 43-9021 |
| Database Administrators                           | 30 | 15-1061 |
| Demonstrators & Product Promoters                 | 50 | 41-9011 |
| Dental Assistants                                 | 44 | 31-9091 |
| Dental Hygienists                                 | 43 | 29-2021 |
| Dental Laboratory Technicians                     | 61 | 51-9081 |
| Dentists, All Other                               | 42 | 29-1029 |
| Dentists, General                                 | 42 | 29-1021 |
| Derrick Operators, Oil & Gas                      | 55 | 47-5011 |
| Designers, All Other                              | 40 | 27-1029 |
| Desktop Publishers                                | 52 | 43-9031 |
| Detectives & Criminal Investigators               | 45 | 33-3021 |
| Diagnostic Medical Sonographers                   | 43 | 29-2032 |
| Dietetic Technicians                              | 43 | 29-2051 |
| Dietitians & Nutritionists                        | 42 | 29-1031 |
| Dining Room, Cafeteria Attend. & Bartender Help.  | 46 | 35-9011 |
| Directors, Religious Activities & Education       | 35 | 21-2021 |
| Dishwashers                                       | 46 | 35-9021 |
| Dispatchers, Except Police, Fire, & Ambulance     | 52 | 43-5032 |
| Door-To-Door Sales, News, Street Vend. & Related  | 50 | 41-9091 |
| Drafters, All Other                               | 32 | 17-3019 |
| Dredge Operators                                  | 64 | 53-7031 |
| Drill & Boring Mach. Tool Setters, Ops. & Tenders | 59 | 51-4032 |
| Driver/Sales Workers                              | 63 | 53-3031 |
| Drywall & Ceiling Tile Installers                 | 54 | 47-2081 |

## E

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| Earth Drillers, Excl. Oil & Gas                      | 55 | 47-5021 |
| Economics Teachers, Postsecondary **                 | 37 | 25-1063 |
| Economists   | 34 | 19-3011 |
| Editors  | 41 | 27-3041 |
| Education Admin., Elementary & Secondary             | 27 | 11-9032 |
| Education Admin., Preschool & Child Care             | 27 | 11-9031 |
| Education Administrators, All Other                  | 27 | 11-9039 |
| Education Administrators, Postsecondary              | 27 | 11-9033 |
| Education Teachers, Postsecondary **                 | 37 | 25-1081 |
| Education, Training, & Library Workers, All Other    | 39 | 25-9099 |
| Educational, Vocational, & School Counselors         | 35 | 21-1012 |
| Elec. & Electron. Install. & Repair., Transp. Equip. | 56 | 49-2093 |
| Elec. & Electron. Repair- Comm. & Ind. Equip.        | 56 | 49-2094 |
| Elec. & Electron. Repair- Pwrhouse, Subst. & Relay   | 56 | 49-2095 |
| Electric Motor, Power Tool, & Related Repairers      | 56 | 49-2092 |
| Electrical & Electronic Engineering Technicians      | 32 | 17-3023 |
| Electrical & Electronic Equipment Assemblers         | 58 | 51-2022 |

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| Electrical & Electronics Drafters                    | 32 | 17-3012 |
| Electrical Engineers                                 | 31 | 17-2071 |
| Electrical Power-Line Installers & Repairers         | 57 | 49-9051 |
| Electricians   | 54 | 47-2111 |
| Electromechanical Equipment Assemblers               | 58 | 51-2023 |
| Electro-Mechanical Technicians                       | 32 | 17-3024 |
| Electron. Equip. Install. & Repair., Motor Vehicles  | 56 | 49-2096 |
| Electron. Home Entertain. Equip. Install & Repair    | 56 | 49-2097 |
| Electronics Engineers, Excl. Computer                | 31 | 17-2072 |
| Elementary School Teachers, Excl. Special Ed. **     | 38 | 25-2021 |
| Elevator Installers & Repairers                      | 55 | 47-4021 |
| Eligibility Interviewers, Government Programs        | 51 | 43-4061 |
| Embalmers  | 48 | 39-4011 |
| Emergency Management Specialists                     | 29 | 13-1061 |
| Emergency Medical Technicians & Paramedics           | 43 | 29-2041 |
| Employment, Recruitment & Placement Specialists      | 29 | 13-1071 |
| Engine & Other Machine Assemblers                    | 58 | 51-2031 |
| Engineering Managers                                 | 27 | 11-9041 |
| Engineering Teachers, Postsecondary **               | 37 | 25-1032 |
| Engineering Techs., Except Drafters, All Other       | 32 | 17-3029 |
| Engineers, All Other                                 | 31 | 17-2199 |
| English Language & Lit. Teachers, Post. **           | 38 | 25-1123 |
| Entertainers & Performers, Sports & Related, Other   | 40 | 27-2099 |
| Entertainment Attend. & Related Workers, Other       | 48 | 39-3099 |
| Environmental Engineering Technicians                | 32 | 17-3025 |
| Environmental Engineers                              | 31 | 17-2081 |
| Environmental Sci. & Protection Techs., Incl. Health | 34 | 19-4091 |
| Environmental Scientists & Specialists, Incl. Health | 33 | 19-2041 |
| Epidemiologists                                      | 33 | 19-1041 |
| Etchers & Engravers                                  | 62 | 51-9194 |
| Excavating & Loading Machine & Dragline Ops.         | 64 | 53-7032 |
| Executive Secretaries & Admin. Assistants            | 52 | 43-6011 |
| Explosives Workers, Ordnance Handling & Blasters     | 55 | 47-5031 |
| Extraction Workers, All Other                        | 55 | 47-5099 |
| Extrude, Form, Press & Compact Mach. Ops.            | 61 | 51-9041 |
| Extruding & Drawing Mach. Setters, Ops. & Tenders    | 58 | 51-4021 |
| Extruding & Forming Mach. Setters, Ops. & Tenders    | 60 | 51-6091 |

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| Fabric & Apparel Patternmakers          | 60 | 51-6092 |
| Fabric Menders, Excl. Garment           | 57 | 49-9093 |
| Fallers                                 | 53 | 45-4021 |
| Family & General Practitioners          | 42 | 29-1062 |
| Farm & Home Management Advisors         | 39 | 25-9021 |
| Farm Equipment Mechanics                | 56 | 49-3041 |
| Farm Labor Contractors                  | 53 | 45-1012 |
| Farm, Ranch, & Other Agricultural Mgrs. | 27 | 11-9011 |
| Farmers & Ranchers                      | 27 | 11-9012 |



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| Farmworkers & Laborers, Crop, Nursery                  | 53   | 45-2092 |
| Farmworkers, Farm & Ranch Animals                      | 53   | 45-2093 |
| Fashion Designers                                      | 40   | 27-1022 |
| Fence Erectors   | 55   | 47-4031 |
| Fiberglass Laminators & Fabricators                    | 58   | 51-2091 |
| File Clerks  | 51   | 43-4071 |
| Film & Video Editors                                   | 41   | 27-4032 |
| Financial Analysts                                     | 29   | 13-2051 |
| Financial Examiners                                    | 29   | 13-2061 |
| Financial Managers                                     | 27   | 11-3031 |
| Financial Specialists, All Other                       | 29   | 13-2099 |
| Fine Artists, Incl. Painters, Sculptors & Illustrators | 40   | 27-1013 |
| Fire Fighters  | 45   | 33-2011 |
| Fire Inspectors & Investigators                        | 45   | 33-2021 |
| Fish & Game Wardens                                    | 45   | 33-3031 |
| Fitness Trainers & Aerobics Instructors                | 49   | 39-9031 |
| Flight Attendants                                      | 48   | 39-6031 |
| Floor Layers, Except Carpet, Wood, & Hard Tiles        | 54   | 47-2042 |
| Floor Sanders & Finishers                              | 54   | 47-2043 |
| Floral Designers                                       | 40   | 27-1023 |
| Food & Tobacco Roast., Baking, Drying Mach. Ops.       | 58   | 51-3091 |
| Food Batchmakers                                       | 58   | 51-3092 |
| Food Cooking Machine Operators & Tenders               | 58   | 51-3093 |
| Food Prep. & Serving Related Workers, Other            | 46   | 35-9099 |
| Food Preparation Workers                               | 46   | 35-2021 |
| Food Scientists & Technologists                        | 33   | 19-1012 |
| Food Servers, Nonrestaurant                            | 46   | 35-3041 |
| Food Service Managers                                  | 27   | 11-9051 |
| Foreign Language & Literature Teachers, Post. **       | 38   | 25-1124 |
| Forensic Science Technicians                           | 34   | 19-4092 |
| Forest & Conservation Technicians                      | 34   | 19-4093 |
| Forest & Conservation Workers                          | 53   | 45-4011 |
| Forest Fire Inspectors & Prevention Specialists        | 45   | 33-2022 |
| Foresters  | 33   | 19-1032 |
| Forestry & Conservation Sci. Teachers, Post. **        | 37   | 25-1043 |
| Forging Machine Setters, Operators & Tenders           | 58   | 51-4022 |
| Foundry Mold & Coremakers                              | 59   | 51-4071 |
| Funeral Attendants                                     | 48   | 39-4021 |
| Funeral Directors                                      | 28   | 11-9061 |
| Furnace, Kiln, Oven, Drier & Kettle Ops. & Tenders     | 61   | 51-9051 |
| Furniture Finishers                                    | 60   | 51-7021 |
| <b>G</b>   |      |         |
| Gaming & Sports Book Writers & Runners                 | 48   | 39-3012 |
| Gaming Change Persons & Booth Cashiers                 | 50   | 41-2012 |
| Gaming Dealers   | 48   | 39-3011 |
| Gaming Supervisors                                     | 48   | 39-1011 |
| Gaming Surveillance Ofcrs. & Gaming Investigators      | 45   | 33-9031 |

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| Gas Compressor & Gas Pumping Station Ops.           | 64   | 53-7071 |
| Gas Plant Operators                                 | 61   | 51-8092 |
| General & Operations Managers                       | 27   | 11-1021 |
| Geographers   | 34   | 19-3092 |
| Geography Teachers, Postsecondary **                | 37   | 25-1064 |
| Geological & Petroleum Technicians                  | 34   | 19-4041 |
| Geoscientists, Excl. Hydrologists & Geographers     | 33   | 19-2042 |
| Glaziers  | 54   | 47-2121 |
| Graders & Sorters, Agricultural Products            | 53   | 45-2041 |
| Graduate Teaching Assistants                        | 38   | 25-1191 |
| Graphic Designers                                   | 40   | 27-1024 |
| Grind, Lap, Polish & Buff Mach. Tool Setters, Ops.  | 59   | 51-4033 |
| Grinding & Polishing Workers, Hand                  | 61   | 51-9022 |
| Grounds Maintenance Workers, All Other              | 47   | 37-3019 |
| <b>H</b>  |      |         |
| H.R. Assistants, Excl. Payroll & Timekeeping        | 51   | 43-4161 |
| Hairdressers, Hairstylists, & Cosmetologists        | 48   | 39-5012 |
| Hazardous Materials Removal Workers                 | 55   | 47-4041 |
| Health & Safety Engineers., Excl. Mining Safety     | 31   | 17-2111 |
| Health Diagnosing & Treating Practitioners, Other   | 42   | 29-1199 |
| Health Educators                                    | 35   | 21-1091 |
| Health Specialties Teachers, Postsecondary **       | 37   | 25-1071 |
| Health Technologists & Technicians, All Other       | 43   | 29-2099 |
| Healthcare Practitioners & Tech. Workers, Other     | 43   | 29-9099 |
| Healthcare Support Workers, All Other               | 44   | 31-9099 |
| Heat Treating Equip. Setters, Ops. & Tenders        | 59   | 51-4191 |
| Heating, A.C. & Refrigeration Mech. & Installers    | 57   | 49-9021 |
| Helpers, Construction Trades, All Other             | 55   | 47-3019 |
| Helpers--Brick, Block, Stone, Tile & Marble Setters | 55   | 47-3011 |
| Helpers--Carpenters                                 | 55   | 47-3012 |
| Helpers--Electricians                               | 55   | 47-3013 |
| Helpers--Extraction Workers                         | 55   | 47-5081 |
| Helpers--Installation, Maint. & Repair Workers      | 57   | 49-9098 |
| Helpers--Painter, Paperhanger, Plasterer & Stucco   | 55   | 47-3014 |
| Helpers--Pipelayer & fitter, Plumber & Steamfitter  | 55   | 47-3015 |
| Helpers--Production Workers                         | 62   | 51-9198 |
| Helpers--Roofers                                    | 55   | 47-3016 |
| Highway Maintenance Workers                         | 55   | 47-4051 |
| Historians  | 34   | 19-3093 |
| History Teachers, Postsecondary **                  | 38   | 25-1125 |
| Hoist & Winch Operators                             | 64   | 53-7041 |
| Home Appliance Repairers                            | 57   | 49-9031 |
| Home Economics Teachers, Postsecondary **           | 38   | 25-1192 |
| Home Health Aides                                   | 44   | 31-1011 |
| Hosts & Hostesses, Restaurant & Lounge              | 46   | 35-9031 |
| Hotel, Motel, & Resort Desk Clerks                  | 51   | 43-4081 |
| Human Res., Trng. & Labor Relations Spec., Other    | 29   | 13-1079 |



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| Human Resources Managers, All Other                | 27   | 11-3049 |
| Hydrologists                                       | 33   | 19-2043 |
| <b>I</b>   |      |         |
| Industrial Engineering Technicians                 | 32   | 17-3026 |
| Industrial Engineers                               | 31   | 17-2112 |
| Industrial Machinery Mechanics                     | 57   | 49-9041 |
| Industrial Production Managers                     | 27   | 11-3051 |
| Industrial Truck & Tractor Operators               | 64   | 53-7051 |
| Information & Record Clerks, All Other             | 51   | 43-4199 |
| Inspectors, Testers, Sorters, Samplers & Weighers  | 61   | 51-9061 |
| Installation, Maint. & Repair Workers, All Other   | 57   | 49-9099 |
| Instructional Coordinators                         | 39   | 25-9031 |
| Insulation Workers, Floor, Ceiling, & Wall         | 54   | 47-2131 |
| Insulation Workers, Mechanical                     | 54   | 47-2132 |
| Insurance Appraisers, Auto Damage                  | 29   | 13-1032 |
| Insurance Claims & Policy Processing Clerks        | 52   | 43-9041 |
| Insurance Sales Agents                             | 50   | 41-3021 |
| Insurance Underwriters                             | 29   | 13-2053 |
| Interior Designers                                 | 40   | 27-1025 |
| Internists, General                                | 42   | 29-1063 |
| Interpreters & Translators                         | 41   | 27-3091 |
| Interviewers, Excl. Eligibility & Loan             | 51   | 43-4111 |
| <b>J</b>   |      |         |
| Janitors & Cleaners, Excl. Maids & Housekeeping    | 47   | 37-2011 |
| Jewelers & Precious Stone & Metal Workers          | 61   | 51-9071 |
| Job Printers                                       | 59   | 51-5021 |
| Judges, Magistrate Judges, & Magistrates           | 36   | 23-1023 |
| <b>K</b>   |      |         |
| Kindergarten Teachers, Excl. Special Education **  | 38   | 25-2012 |
| <b>L</b>   |      |         |
| Laborers & Freight, Stock & Material Movers, Hand  | 64   | 53-7062 |
| Landscape Architects                               | 31   | 17-1012 |
| Landscaping & Groundskeeping Workers               | 47   | 37-3011 |
| Lathe & Turning Mach. Tool Setters, Ops. & Tenders | 59   | 51-4034 |
| Laundry & Dry-Cleaning Workers                     | 60   | 51-6011 |
| Law Clerks   | 36   | 23-2092 |
| Law Teachers, Postsecondary **                     | 37   | 25-1112 |
| Lawyers  | 36   | 23-1011 |
| Lay-Out Workers, Metal & Plastic                   | 59   | 51-4192 |

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| Legal Secretaries                                  | 52   | 43-6012 |
| Legal Support Workers, All Other                   | 36   | 23-2099 |
| Legislators  | 27   | 11-1031 |
| Librarians   | 38   | 25-4021 |
| Library Assistants, Clerical                       | 51   | 43-4121 |
| Library Science Teachers, Postsecondary **         | 37   | 25-1082 |
| Library Technicians                                | 38   | 25-4031 |
| Licensed Practical & Licensed Voc. Nurses          | 43   | 29-2061 |
| Life Scientists, All Other                         | 33   | 19-1099 |
| Life, Physical & Social Science Techs., All Other  | 34   | 19-4099 |
| Lifeguards, Ski Patrol & Rec. Protective Workers   | 45   | 33-9092 |
| Loading Machine Operators, Underground Mining      | 64   | 53-7033 |
| Loan Counselors                                    | 29   | 13-2071 |
| Loan Interviewers & Clerks                         | 51   | 43-4131 |
| Loan Officers                                      | 29   | 13-2072 |
| Locker Room, Coatroom & Dressing Room Attend.      | 48   | 39-3093 |
| Locksmiths & Safe Repairers                        | 57   | 49-9094 |
| Locomotive Engineers                               | 63   | 53-4011 |
| Locomotive Firers                                  | 63   | 53-4012 |
| Lodging Managers                                   | 28   | 11-9081 |
| Log Graders & Scalers                              | 53   | 45-4023 |
| Logging Equipment Operators                        | 53   | 45-4022 |
| Logging Workers, All Other                         | 53   | 45-4029 |
| Logisticians                                       | 29   | 13-1081 |
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| Machine Feeders & Offbearers                       | 64   | 53-7063 |
| Machinists   | 59   | 51-4041 |
| Maids & Housekeeping Cleaners                      | 47   | 37-2012 |
| Mail Clerks & Mail Machine Operators, Excl. Postal | 52   | 43-9051 |
| Maintenance & Repair Workers, General              | 57   | 49-9042 |
| Maintenance Workers, Machinery                     | 57   | 49-9043 |
| Management Analysts                                | 29   | 13-1111 |
| Managers of Constr. Trades & Extraction Workers    | 54   | 47-1011 |
| Managers of Correctional Officers                  | 45   | 33-1011 |
| Managers of Farming, Fishing & Forestry Workers    | 53   | 45-1011 |
| Managers of Fire Fighting & Prevention Workers     | 45   | 33-1021 |
| Managers of Food Preparation & Serving Workers     | 46   | 35-1012 |
| Managers of Housekeeping & Janitorial Workers      | 47   | 37-1011 |
| Managers of Landscaping, Lawn & Grounds. Work.     | 47   | 37-1012 |
| Managers of Mechanics, Installers, & Repairers     | 56   | 49-1011 |
| Managers of Non-Retail Sales Workers               | 50   | 41-1012 |
| Managers of Office & Admin. Support Workers        | 51   | 43-1011 |
| Managers of Personal Service Workers               | 48   | 39-1021 |
| Managers of Police & Detectives                    | 45   | 33-1012 |
| Managers of Production & Operating Workers         | 58   | 51-1011 |
| Managers of Retail Sales Workers                   | 50   | 41-1011 |
| Managers, All Other                                | 28   | 11-9199 |
| Managers, Protective Service Workers, All Other    | 45   | 33-1099 |

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| Manicurists & Pedicurists                           | 48   | 39-5092 |
| Manufactured Building & Mobile Home Installers      | 57   | 49-9095 |
| Marine Engineers & Naval Architects                 | 31   | 17-2121 |
| Market Research Analysts                            | 34   | 19-3021 |
| Marketing Managers                                  | 27   | 11-2021 |
| Marriage & Family Therapists                        | 35   | 21-1013 |
| Massage Therapists                                  | 44   | 31-9011 |
| Material Moving Workers, All Other                  | 64   | 53-7199 |
| Materials Engineers                                 | 31   | 17-2131 |
| Materials Scientists                                | 33   | 19-2032 |
| Mathematical Science Occupations, All Other         | 30   | 15-2099 |
| Mathematical Science Teachers, Postsecondary **     | 37   | 25-1022 |
| Mathematicians                                      | 30   | 15-2021 |
| Meat, Poultry, & Fish Cutters & Trimmers            | 58   | 51-3022 |
| Mechanical Door Repairers                           | 57   | 49-9011 |
| Mechanical Drafters                                 | 32   | 17-3013 |
| Mechanical Engineering Technicians                  | 32   | 17-3027 |
| Mechanical Engineers                                | 31   | 17-2141 |
| Media & Communication Equip. Workers, Other         | 41   | 27-4099 |
| Media & Communication Workers, All Other            | 41   | 27-3099 |
| Medical & Clinical Laboratory Technicians           | 43   | 29-2012 |
| Medical & Clinical Laboratory Technologists         | 43   | 29-2011 |
| Medical & Health Services Managers                  | 28   | 11-9111 |
| Medical & Public Health Social Workers              | 35   | 21-1022 |
| Medical Appliance Technicians                       | 61   | 51-9082 |
| Medical Assistants                                  | 44   | 31-9092 |
| Medical Equipment Preparers                         | 44   | 31-9093 |
| Medical Equipment Repairers                         | 57   | 49-9062 |
| Medical Records & Health Info. Technicians          | 43   | 29-2071 |
| Medical Scientists, Excl. Epidemiologists           | 33   | 19-1042 |
| Medical Secretaries                                 | 52   | 43-6013 |
| Medical Transcriptionists                           | 44   | 31-9094 |
| Meeting & Convention Planners                       | 29   | 13-1121 |
| Mental Health & Substance Abuse Social Workers      | 35   | 21-1023 |
| Mental Health Counselors                            | 35   | 21-1014 |
| Merchandise Displayers & Window Trimmers            | 40   | 27-1026 |
| Metal Workers & Plastic Workers, All Other          | 59   | 51-4199 |
| Metal-Refining Furnace Operators & Tenders          | 59   | 51-4051 |
| Meter Readers, Utilities                            | 52   | 43-5041 |
| Mgrs. of Helpers, Laborers & Material Movers, Hand  | 63   | 53-1021 |
| Mgrs. of Transp., Material-Moving & Vehicle Ops.    | 63   | 53-1031 |
| Microbiologists                                     | 33   | 19-1022 |
| Middle School Teachers, Excl. Special & Voc. Ed. ** | 38   | 25-2022 |
| Milling & Planing Machine Setters, Ops. & Tenders   | 59   | 51-4035 |
| Millwrights   | 57   | 49-9044 |
| Mine Cutting & Channeling Machine Operators         | 55   | 47-5042 |
| Mining & Geological Engineers., Incl. Mining Safety | 31   | 17-2151 |
| Mining Machine Operators, All Other                 | 55   | 47-5049 |
| Mixing & Blending Mach. Setters, Ops. & Tenders     | 61   | 51-9023 |
| Mobile Heavy Equip. Mechanics, Excl. Engines        | 56   | 49-3042 |
| Model Makers, Metal & Plastic                       | 59   | 51-4061 |
| Model Makers, Wood                                  | 60   | 51-7031 |

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| Models  | 50   | 41-9012 |
| Molders, Shapers & Casters, Excl. Metal & Plastic | 62   | 51-9195 |
| Molding, Coremaking & Casting Mach. Setters, Ops. | 59   | 51-4072 |
| Motion Picture Projectionists                     | 48   | 39-3021 |
| Motor Vehicle Operators, All Other                | 63   | 53-3099 |
| Motorboat Mechanics                               | 56   | 49-3051 |
| Motorboat Operators                               | 63   | 53-5022 |
| Motorcycle Mechanics                              | 56   | 49-3052 |
| Multi-Media Artists & Animators                   | 40   | 27-1014 |
| Multiple Mach. Tool Setters, Ops. & Tenders       | 59   | 51-4081 |
| Museum Technicians & Conservators                 | 38   | 25-4013 |
| Music Directors & Composers                       | 40   | 27-2041 |
| Musical Instrument Repairers & Tuners             | 57   | 49-9063 |
| Musicians & Singers                               | 40   | 27-2042 |
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| Natural Sciences Managers                         | 28   | 11-9121 |
| Network & Computer Systems Administrators         | 30   | 15-1071 |
| Network Systems & Data Communications Analysts    | 30   | 15-1081 |
| New Accounts Clerks                               | 51   | 43-4141 |
| Nonfarm Animal Caretakers                         | 48   | 39-2021 |
| Nuclear Engineers                                 | 31   | 17-2161 |
| Nuclear Medicine Technologists                    | 43   | 29-2033 |
| Numerical Tool & Process Control Programmers      | 58   | 51-4012 |
| Nursing Aides, Orderlies, & Attendants            | 44   | 31-1012 |
| Nursing Instructors & Teachers, Postsecondary **  | 37   | 25-1072 |
| O   |      |         |
| Obstetricians & Gynecologists                     | 42   | 29-1064 |
| Occupational Health & Safety Specialists          | 43   | 29-9011 |
| Occupational Health & Safety Technicians          | 43   | 29-9012 |
| Occupational Therapist Aides                      | 44   | 31-2012 |
| Occupational Therapist Assistants                 | 44   | 31-2011 |
| Occupational Therapists                           | 42   | 29-1122 |
| Office & Admin. Support Workers, All Other        | 52   | 43-9199 |
| Office Clerks, General                            | 52   | 43-9061 |
| Office Machine Operators, Excl. Computer          | 52   | 43-9071 |
| Operating Engineers & Other Constr. Equip. Ops.   | 54   | 47-2073 |
| Operations Research Analysts                      | 30   | 15-2031 |
| Ophthalmic Laboratory Technicians                 | 61   | 51-9083 |
| Opticians, Dispensing                             | 43   | 29-2081 |
| Optometrists                                      | 42   | 29-1041 |
| Oral & Maxillofacial Surgeons                     | 42   | 29-1022 |
| Order Clerks                                      | 51   | 43-4151 |
| Orthodontists                                     | 42   | 29-1023 |
| Orthotists & Prosthetists                         | 43   | 29-2091 |
| Outdoor Power Equip. & Other Small Eng. Mech.     | 56   | 49-3053 |

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| Packaging & Filling Machine Ops. & Tenders       | 61 | 51-9111 |
| Packers & Packagers, Hand                        | 64 | 53-7064 |
| Painters, Construction & Maintenance             | 54 | 47-2141 |
| Painters, Transportation Equipment               | 61 | 51-9122 |
| Painting, Coating, & Decorating Workers          | 61 | 51-9123 |
| Paper Goods Machine Setters, Ops. & Tenders      | 62 | 51-9196 |
| Paperhangers                                     | 54 | 47-2142 |
| Paralegals & Legal Assistants                    | 36 | 23-2011 |
| Parking Enforcement Workers                      | 45 | 33-3041 |
| Parking Lot Attendants                           | 64 | 53-6021 |
| Parts Salespersons                               | 50 | 41-2022 |
| Patternmakers, Metal & Plastic                   | 59 | 51-4062 |
| Patternmakers, Wood                              | 60 | 51-7032 |
| Paving, Surfacing & Tamping Equip. Operators     | 54 | 47-2071 |
| Payroll & Timekeeping Clerks                     | 51 | 43-3051 |
| Pediatricians, General                           | 42 | 29-1065 |
| Personal & Home Care Aides                       | 49 | 39-9021 |
| Personal Care & Service Workers, All Other       | 49 | 39-9099 |
| Personal Financial Advisors                      | 29 | 13-2052 |
| Pest Control Workers                             | 47 | 37-2021 |
| Pesticide Handlers, Sprayers & Applicators, Veg. | 47 | 37-3012 |
| Petroleum Engineers                              | 31 | 17-2171 |
| Petroleum Pump System Ops., Refinery Ops.        | 61 | 51-8093 |
| Pharmacists                                      | 42 | 29-1051 |
| Pharmacy Aides                                   | 44 | 31-9095 |
| Pharmacy Technicians                             | 43 | 29-2052 |
| Philosophy & Religion Teachers, Post. **         | 38 | 25-1126 |
| Photographers                                    | 41 | 27-4021 |
| Photographic Process Workers                     | 61 | 51-9131 |
| Photographic Processing Machine Operators        | 61 | 51-9132 |
| Physical Scientists, All Other                   | 33 | 19-2099 |
| Physical Therapist Aides                         | 44 | 31-2022 |
| Physical Therapist Assistants                    | 44 | 31-2021 |
| Physical Therapists                              | 42 | 29-1123 |
| Physician Assistants                             | 42 | 29-1071 |
| Physicians & Surgeons, All Other                 | 42 | 29-1069 |
| Physicists                                       | 33 | 19-2012 |
| Physics Teachers, Postsecondary **               | 37 | 25-1054 |
| Pile-Driver Operators                            | 54 | 47-2072 |
| Pipelayers                                       | 54 | 47-2151 |
| Plant & System Operators, All Other              | 61 | 51-8099 |
| Plasterers & Stucco Masons                       | 54 | 47-2161 |
| Plating & Coating Mach. Setters, Ops. & Tenders  | 59 | 51-4193 |
| Plumbers, Pipefitters, & Steamfitters            | 54 | 47-2152 |
| Podiatrists                                      | 42 | 29-1081 |
| Police & Sheriff's Patrol Officers               | 45 | 33-3051 |
| Police, Fire, & Ambulance Dispatchers            | 52 | 43-5031 |
| Political Science Teachers, Postsecondary **     | 37 | 25-1065 |

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| Political Scientists                              | 34 | 19-3094 |
| Postal Service Clerks                             | 52 | 43-5051 |
| Postal Service Mail Carriers                      | 52 | 43-5052 |
| Postal Service Mail Sorters, Processors           | 52 | 43-5053 |
| Postmasters & Mail Superintendents                | 28 | 11-9131 |
| Postsecondary Teachers, All Other **              | 38 | 25-1199 |
| Pourers & Casters, Metal                          | 59 | 51-4052 |
| Power Distributors & Dispatchers                  | 61 | 51-8012 |
| Power Plant Operators                             | 61 | 51-8013 |
| Precision Instrument & Equip. Repairers, Other    | 57 | 49-9069 |
| Prepress Technicians & Workers                    | 59 | 51-5022 |
| Preschool Teachers, Excl. Special Education       | 38 | 25-2011 |
| Pressers, Textile, Garment, & Related Materials   | 60 | 51-6021 |
| Printing Machine Operators                        | 59 | 51-5023 |
| Private Detectives & Investigators                | 45 | 33-9021 |
| Probation Officers & Correctional Treatment Spec. | 35 | 21-1092 |
| Procurement Clerks                                | 51 | 43-3061 |
| Producers & Directors                             | 40 | 27-2012 |
| Production Workers, All Other                     | 62 | 51-9199 |
| Production, Planning, & Expediting Clerks         | 52 | 43-5061 |
| Proofreaders & Copy Markers                       | 52 | 43-9081 |
| Property, Real Estate, Community Assoc. Mgrs.     | 28 | 11-9141 |
| Protective Service Workers, All Other             | 45 | 33-9099 |
| Psychiatric Aides                                 | 44 | 31-1013 |
| Psychiatric Technicians                           | 43 | 29-2053 |
| Psychiatrists                                     | 42 | 29-1066 |
| Psychologists, All Other                          | 34 | 19-3039 |
| Psychology Teachers, Postsecondary **             | 37 | 25-1066 |
| Public Address System & Other Announcers          | 41 | 27-3012 |
| Public Relations Managers                         | 27 | 11-2031 |
| Public Relations Specialists                      | 41 | 27-3031 |
| Pump Operators, Except Wellhead Pumpers           | 64 | 53-7072 |
| Purchasing Agents & Buyers, Farm Products         | 29 | 13-1021 |
| Purchasing Agents, Excl. Wholesale, Retail & Farm | 29 | 13-1023 |
| Purchasing Managers                               | 27 | 11-3061 |

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| Radiation Therapists                        | 42 | 29-1124 |
| Radio & Television Announcers               | 41 | 27-3011 |
| Radio Mechanics                             | 56 | 49-2021 |
| Radiologic Technologists & Technicians      | 43 | 29-2034 |
| Rail Car Repairers                          | 56 | 49-3043 |
| Rail Transportation Workers, All Other      | 63 | 53-4099 |
| Rail Yard Engineers, Dinkey Ops. & Hostlers | 63 | 53-4013 |
| Railroad Brake, Signal, & Switch Operators  | 63 | 53-4021 |
| Railroad Conductors & Yardmasters           | 63 | 53-4031 |
| Rail-Track Laying & Maint. Equip. Operators | 55 | 47-4061 |
| Real Estate Brokers                         | 50 | 41-9021 |
| Real Estate Sales Agents                    | 50 | 41-9022 |

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| Receptionists & Information Clerks                 | 51   | 43-4171 |
| Recreation & Fitness Studies Teachers, Post. **    | 38   | 25-1193 |
| Recreation Workers                                 | 49   | 39-9032 |
| Recreational Therapists                            | 42   | 29-1125 |
| Recreational Vehicle Service Technicians           | 56   | 49-3092 |
| Refractory Materials Repairers, Excl. Brickmasons  | 57   | 49-9045 |
| Refuse & Recyclable Material Collectors            | 64   | 53-7081 |
| Registered Nurses                                  | 42   | 29-1111 |
| Rehabilitation Counselors                          | 35   | 21-1015 |
| Reinforcing Iron & Rebar Workers                   | 54   | 47-2171 |
| Religious Workers, All Other                       | 35   | 21-2099 |
| Reporters & Correspondents                         | 41   | 27-3022 |
| Reservation, Transp. Ticket Agents & Travel Clerks | 51   | 43-4181 |
| Residential Advisors                               | 49   | 39-9041 |
| Respiratory Therapists                             | 42   | 29-1126 |
| Respiratory Therapy Technicians                    | 43   | 29-2054 |
| Retail Salespersons                                | 50   | 41-2031 |
| Riggers  | 57   | 49-9096 |
| Rock Splitters, Quarry                             | 55   | 47-5051 |
| Rolling Machine Setters, Operators, & Tenders      | 58   | 51-4023 |
| Roof Bolters, Mining                               | 55   | 47-5061 |
| Roofers  | 54   | 47-2181 |
| Rotary Drill Operators, Oil & Gas                  | 55   | 47-5012 |
| Roustabouts, Oil & Gas                             | 55   | 47-5071 |

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| Sailors & Marine Oilers                                   | 63 | 53-5011 |
| Sales & Related Workers, All Other                        | 50 | 41-9099 |
| Sales Engineers   | 50 | 41-9031 |
| Sales Managers  | 27 | 11-2022 |
| Sales Representatives, Services, All Other                | 50 | 41-3099 |
| Sales Reps., Wholesale & Manuf., Excl. Tech. & Sci.       | 50 | 41-4012 |
| Sales Reps., Wholesale & Manuf., Tech. & Sci.             | 50 | 41-4011 |
| Sawing Machine Setters, Ops. & Tenders, Wood              | 60 | 51-7041 |
| Sec. School Teachers, Excl. Special & Voc. Ed. **         | 38 | 25-2031 |
| Secretaries, Excl. Legal, Medical, & Executive            | 52 | 43-6014 |
| Securities, Commodities & Financial Serv. Sales           | 50 | 41-3031 |
| Security & Fire Alarm Systems Installers                  | 56 | 49-2098 |
| Security Guards   | 45 | 33-9032 |
| Self-Enrichment Education Teachers                        | 38 | 25-3021 |
| Separate, Filter, Clarify, Precipitate & Still Mach. Ops. | 61 | 51-9012 |
| Septic Tank Servicers & Sewer Pipe Cleaners               | 55 | 47-4071 |
| Service Station Attendants                                | 64 | 53-6031 |
| Service Unit Operators, Oil, Gas, & Mining                | 55 | 47-5013 |
| Set & Exhibit Designers                                   | 40 | 27-1027 |
| Sewers, Hand  | 60 | 51-6051 |
| Sewing Machine Operators                                  | 60 | 51-6031 |
| Shampooers  | 48 | 39-5093 |
| Sheet Metal Workers                                       | 54 | 47-2211 |

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| Ship Engineers                                      | 63   | 53-5031 |
| Shipping, Receiving, & Traffic Clerks               | 52   | 43-5071 |
| Shoe & Leather Workers & Repairers                  | 60   | 51-6041 |
| Shoe Machine Operators & Tenders                    | 60   | 51-6042 |
| Shuttle Car Operators                               | 64   | 53-7111 |
| Signal & Track Switch Repairers                     | 57   | 49-9097 |
| Skin Care Specialists                               | 48   | 39-5094 |
| Slaughterers & Meat Packers                         | 58   | 51-3023 |
| Social & Community Service Managers                 | 28   | 11-9151 |
| Social & Human Service Assistants                   | 35   | 21-1093 |
| Social Science Research Assistants                  | 34   | 19-4061 |
| Social Sciences Teachers, Post., All Other **       | 37   | 25-1069 |
| Social Scientists & Related Workers, All Other      | 34   | 19-3099 |
| Social Work Teachers, Postsecondary **              | 37   | 25-1113 |
| Social Workers, All Other                           | 35   | 21-1029 |
| Sociology Teachers, Postsecondary **                | 37   | 25-1067 |
| Soil & Plant Scientists                             | 33   | 19-1013 |
| Sound Engineering Technicians                       | 41   | 27-4014 |
| Spec. Ed. Teachers, Pre., Kinder. & Elem. School ** | 38   | 25-2041 |
| Special Education Teachers, Middle School **        | 38   | 25-2042 |
| Special Education Teachers, Secondary School **     | 38   | 25-2043 |
| Speech-Language Pathologists                        | 42   | 29-1127 |
| Stationary Engineers & Boiler Operators             | 61   | 51-8021 |
| Statistical Assistants                              | 52   | 43-9111 |
| Statisticians                                       | 30   | 15-2041 |
| Stock Clerks & Order Fillers                        | 52   | 43-5081 |
| Stonemasons   | 54   | 47-2022 |
| Structural Iron & Steel Workers                     | 54   | 47-2221 |
| Structural Metal Fabricators & Fitters              | 58   | 51-2041 |
| Substance Abuse & Behavioral Disorder Couns.        | 35   | 21-1011 |
| Surgeons  | 42   | 29-1067 |
| Surgical Technologists                              | 43   | 29-2055 |
| Survey Researchers                                  | 34   | 19-3022 |
| Surveying & Mapping Technicians                     | 32   | 17-3031 |
| Surveyors   | 31   | 17-1022 |
| Switchboard Operators, Incl. Answering Service      | 51   | 43-2011 |

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| Tailors, Dressmakers, & Custom Sewers            | 60 | 51-6052 |
| Tank Car, Truck, & Ship Loaders                  | 64 | 53-7121 |
| Tapers   | 54 | 47-2082 |
| Tax Examiners, Collectors, & Revenue Agents      | 29 | 13-2081 |
| Tax Preparers                                    | 29 | 13-2082 |
| Taxi Drivers & Chauffeurs                        | 63 | 53-3041 |
| Teacher Assistants **                            | 39 | 25-9041 |
| Teachers & Instructors, All Other **             | 38 | 25-3099 |
| Team Assemblers                                  | 58 | 51-2092 |
| Technical Writers                                | 41 | 27-3042 |
| Telecommunications Equip. Installers & Repairers | 56 | 49-2022 |

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| Telecommunications Line Installers & Repairers      | 57   | 49-9052 |
| Telemarketers                                       | 50   | 41-9041 |
| Telephone Operators                                 | 51   | 43-2021 |
| Tellers   | 51   | 43-3071 |
| Terrazzo Workers & Finishers                        | 54   | 47-2053 |
| Textile Bleaching & Dyeing Mach. Ops. & Tenders     | 60   | 51-6061 |
| Textile Cutting Mach. Setters, Ops. & Tenders       | 60   | 51-6062 |
| Textile Knitting & Weaving Mach. Setters, Ops.      | 60   | 51-6063 |
| Textile Wind, Twist. & Drawing Out Mach. Setters    | 60   | 51-6064 |
| Textile, Apparel & Furnishings Workers, All Other   | 60   | 51-6099 |
| Therapists, All Other                               | 42   | 29-1129 |
| Tile & Marble Setters                               | 54   | 47-2044 |
| Timing Device Assemblers, Adjusters & Calibrators   | 58   | 51-2093 |
| Tire Builders                                       | 62   | 51-9197 |
| Tire Repairers & Changers                           | 56   | 49-3093 |
| Title Examiners, Abstractors, & Searchers           | 36   | 23-2093 |
| Tool & Die Makers                                   | 59   | 51-4111 |
| Tool Grinders, Filers, & Sharpeners                 | 59   | 51-4194 |
| Tour Guides & Escorts                               | 48   | 39-6021 |
| Traffic Technicians                                 | 64   | 53-6041 |
| Training & Development Managers                     | 27   | 11-3042 |
| Training & Development Specialists                  | 29   | 13-1073 |
| Transit & Railroad Police                           | 45   | 33-3052 |
| Transp. Attend., Excl. Flight Attend. & Bag Porters | 48   | 39-6032 |
| Transportation Inspectors                           | 64   | 53-6051 |
| Transportation Workers, All Other                   | 64   | 53-6099 |
| Transportation, Storage, & Distribution Mgrs.       | 27   | 11-3071 |
| Travel Agents                                       | 50   | 41-3041 |
| Travel Guides                                       | 48   | 39-6022 |
| Tree Trimmers & Pruners                             | 47   | 37-3013 |
| Truck Drivers, Heavy & Tractor-Trailer              | 63   | 53-3032 |
| Truck Drivers, Light or Delivery Services           | 63   | 53-3033 |

## U

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| Umpires, Referees, & Other Sports Officials | 40 | 27-2023 |
| Upholsterers                                | 60 | 51-6093 |
| Urban & Regional Planners                   | 34 | 19-3051 |
| Ushers, Lobby Attendants, & Ticket Takers   | 48 | 39-3031 |

## V

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| Veterinarians                                     | 42 | 29-1131 |
| Veterinary Assist. & Laboratory Animal Caretakers | 44 | 31-9096 |
| Veterinary Technologists & Technicians            | 43 | 29-2056 |
| Vocational Ed. Teachers, Secondary School **      | 38 | 25-2032 |
| Vocational Education Teachers, Middle School **   | 38 | 25-2023 |
| Vocational Education Teachers, Postsecondary      | 38 | 25-1194 |

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| W  |      |         |
| Waiters & Waitresses                             | 46   | 35-3031 |
| Watch Repairers                                  | 57   | 49-9064 |
| Water & Liquid Waste Treatment Plant & Sys. Ops. | 61   | 51-8031 |
| Weigher, Measurer, Checker & Sampler, Records    | 52   | 43-5111 |
| Welders, Cutters, Solderers, & Brazers           | 59   | 51-4121 |
| Welding, Soldering & Brazing Mach. Setters, Ops. | 59   | 51-4122 |
| Wellhead Pumps                                   | 64   | 53-7073 |
| Wholesale & Retail Buyers, Excl. Farm Products   | 29   | 13-1022 |
| Woodworkers, All Other                           | 60   | 51-7099 |
| Woodworking Machine Setters, Ops. & Tenders      | 60   | 51-7042 |
| Word Processors & Typists                        | 52   | 43-9022 |
| Writers & Authors                                | 41   | 27-3043 |

## Z

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| Zoologists & Wildlife Biologists | 33 | 19-1023 |
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## Educational/Training Classifications

Occupations are classified into 11 categories and listed according to these principles:

An occupation is placed into the category that best describes the education or training needed by most workers to become fully qualified.

Postsecondary awards, if generally needed for entry into the occupation, take precedence over work-related training even though additional skills or experience may be needed for a worker to become fully qualified.

The length of time an average worker generally needs to become fully qualified through a combination of on-the-job training and experience is used to categorize occupations in which a postsecondary award generally is needed for entry.

### Postsecondary awards

**(1) *First professional degree.*** Completion of the degree usually requires at least three years of full-time academic study beyond a bachelor's degree.

**(2) *Doctoral degree.*** Completion of a Ph.D. or other doctoral degree usually requires at least three years of full-time academic study beyond a bachelor's degree.

**(3) *Master's degree.*** Completion of the degree usually requires one or two years of full time academic study beyond a bachelor's degree.

**(4) *Bachelor's or higher degree, plus work experience.***

Most occupations in this category are management occupations. All require experience in a related non-management position for which a bachelor's or higher degree is usually required.

**(5) *Bachelor's degree.*** Completion of the degree generally requires at least four years, but not more than five years, of full-time academic study.

**(6) *Associate's degree.*** Completion of the degree usually requires at least two years of full-time academic study.

**(7) *Postsecondary vocational awards.*** Some programs last only a few weeks while others may last more than a year. Programs lead to a certificate or other award, but not a degree.

### Work-related training

**(8) *Work experience in a related occupation.*** Many occupations requiring work experience are managers of service, sales and related, production, or other occupations, or are management occupations.

**(9) *Long-term, on-the-job training.*** More than 12 months of on-the-job training or combined work experience and formal classroom instruction are needed for workers to develop the skills necessary to be fully qualified. This category includes formal and informal apprenticeships that may last up to five years. Long-term on-the-job training also includes intensive occupation-specific, employer-sponsored programs that workers must successfully complete. These include fire and police academies and schools for air traffic controllers and flight attendants. In other occupations - insurance sales and securities sales, for example - trainees take formal courses, often provided on the job site, to prepare for the required licensing exams. Individuals undergoing training generally are considered to be employed in the occupation. Also included in this category is the development of a natural ability - such as that possessed by musicians, athletes, actors, and other entertainers - that must be cultivated over several years, frequently in a nonwork setting.

**(10) *Moderate-term, on-the-job training.*** Skills needed to be fully qualified can be acquired during one to twelve months of combined on-the-job experience and informal training.

**(11) *Short-term, on-the-job training.*** Skills needed to be fully qualified can be acquired during a short demonstration of job duties or during one month or less of on-the-job experience or instruction.